

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

### **FORM 20-F**

(Mark One)	
<u></u>	2(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934 R
	ed December 31, 2016
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT OF 1934
SHELL COMPANY REPORT PURSUANT TO SECTION 13 ©  Date of event requiring t  For the transition period from  Commission file	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 his shell company report n to
Commission life	number 1-14940
CEMEX, S.	A.B. de C.V.
(Exact name of Registrant	as specified in its charter)
CEMEX PUBLICLY TRADED STOCK COI (Translation of Registra United Mex (Jurisdiction of incorpo	nt's name into English) cican States
Avenida Ricardo Margáin Zozaya #325, Colonia Nuevo León,	n Valle del Campestre, San Pedro Garza García, México 66265
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+52 81 8888-8888,	+52 81 8888-4399,
Avenida Ricardo Margáin Zozaya #325, Colonia Nuevo León,	
(Name, Telephone, E-mail and/or Facsimile nur	nber and Address of Company Contact Person)
Securities registered or to be registere	*
Title of each class	Name of each exchange on which registered
Ordinary Participation Certificates (Certificados de Participación Ordinarios), or CPOs, each CPO representing two Series A shares and one Series B share, traded in the form of American Depositary Shares, or ADSs, each ADS representing ten CPOs.	New York Stock Exchange
Securities registered or to be registere	d pursuant to Section 12(g) of the Act.
No	ne
(Title o	· · · · · · · · · · · · · · · · · · ·
Securities for which there is a reporting obline No	
(Title o	
Indicate the number of outstanding shares of each of the issuer's classes of capital	or common stock as of the close of the period covered by the annual report
14,039,298,127 CPOs 28,121,583,148 Series A shares (including Series A shares underlying Cl	POs)
14,060,791,574 Series B shares (including Series B shares underlying Cl Indicate by check mark if the registrant is a well-known seasoned issuer, as defined	POS)
If this report is an annual or transition report, indicate by check mark if the registra	
Exchange Act of 1934. Yes No 🗵	
Note—Checking the box above will not relieve any registrant required to file reportheir obligations under those Sections.	ts pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from
Indicate by check mark whether the registrant (1) has filed all reports required to b preceding 12 months (or for such shorter period that the registrant was required to 90 days. Yes 🗵 No 🗌	
Indicate by check mark whether the registrant has submitted electronically and possubmitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chargestrant was required to submit and post such files). N/A	
Indicate by check mark whether the registrant is a large accelerated filer, an accele definitions of "large accelerated filer," "accelerated filer," and "emerging growth of the control o	ompany" in Rule 12b-2 of the Exchange Act (check one).
Large accelerated filer   Accelerated filer   If an emerging growth company that prepares its financial statements in accordance the extended transition period for complying with any new or revised financial acc	
† The term "new or revised financial accounting standard" refers to any update iss Codification after April 5, 2012.	ued by the Financial Accounting Standards Board to its Accounting Standards
Indicate by check mark which basis of accounting the registrant has used to prepar U.S. GAAP  International Financial Reporting Standards a	s issued Other
by the International Accounting Standards Bo If "Other" has been checked in response to the previous question, indicate by check follow. Item 17  Item 18	
If this is an annual report, indicate by check mark whether the registrant is a shell of	company (as defined in Rule 12b-2 of the Exchange Act). Yes \( \subseteq \) No \( \subseteq \)

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#### INTRODUCTION

CEMEX, S.A.B. de C.V. is incorporated as a publicly traded stock corporation with variable capital (*sociedad anónima bursátil de capital variable*) organized under the laws of the United Mexican States ("Mexico"). Except as the context otherwise may require, references in this annual report to "CEMEX," "we," "us" or "our" refer to CEMEX, S.A.B. de C.V. and its consolidated entities. See note 1 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

#### PRESENTATION OF FINANCIAL INFORMATION

Our consolidated financial statements included elsewhere in this annual report have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB").

The regulations of the United States Securities and Exchange Commission (the "SEC"), do not require foreign private issuers that prepare their financial statements on the basis of IFRS (as published by the IASB) to reconcile such financial statements to U.S. Generally Accepted Accounting Principles ("U.S. GAAP").

References in this annual report to "U.S.\$" and "Dollars" are to U.S. Dollars, references to "€" are to Euros, references to "£" and "Pounds" are to British Pounds, and, unless otherwise indicated, references to "Ps," "Mexican Pesos" and "Pesos" are to Mexican Pesos. References to "billion" mean one thousand million. References in this annual report to "CPOs" are to CEMEX, S.A.B. de C.V.'s Certificados de Participación Ordinarios. The Dollar amounts provided below, unless otherwise indicated elsewhere in this annual report, are translations of Peso amounts at an exchange rate of Ps20.72 to U.S.\$1.00, the CEMEX accounting rate (as defined herein) as of December 31, 2016. However, in the case of transactions conducted in Dollars, we have presented the U.S. Dollar amount of the transaction and in most cases, when such amounts are presented in our consolidated financial statements, the corresponding Peso amount is presented in our consolidated financial statements. These translations have been prepared solely for the convenience of the reader and should not be construed as representations that the Mexican Peso amounts actually represent those Dollar amounts or could be converted into Dollars at the rate indicated. Between January 1, 2017 and April 21, 2017, the Mexican Peso appreciated by approximately 9% against the U.S. Dollar, based on the noon buying rate for Pesos. See "Item 3—Key Information—Selected Consolidated Financial Information."

The noon buying rate for Mexican Pesos on December 31, 2016 was Ps20.62 to U.S.\$1.00 and on April 21, 2017, was Ps18.84 to U.S.\$1.00.

References in this annual report to total debt plus other financial obligations (which include debt under the Credit Agreement (as defined herein)) do not include debt and other financial obligations of ours held by us. See notes 2F and 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report for a detailed description of our other financial obligations. Total debt plus other financial obligations differs from the calculation of debt under the Credit Agreement.

We also refer in various places within this annual report to non-IFRS measures, including "Operating EBITDA." "Operating EBITDA" equals operating earnings before other expenses, net, plus amortization and depreciation expenses, as more fully explained in "Item 5—Operating and Financial Review and Prospects." The presentation of these non-IFRS measures is not meant to be considered in isolation or as a substitute for our consolidated financial results prepared in accordance with IFRS as issued by the IASB.

#### **CERTAIN TECHNICAL TERMS**

When used herein, the terms set forth below mean the following:

- **Aggregates** are sand and gravel, which are mined from quarries. They give ready-mix concrete its necessary volume and add to its overall strength. Under normal circumstances, one cubic meter of fresh concrete contains two metric tons of gravel and sand.
- Clinker is an intermediate cement product made by sintering limestone, clay, and iron oxide in a kiln at around 1,450 degrees Celsius. One metric ton of clinker is used to make approximately 1.1 metric tons of gray portland cement.
- **Gray portland cement**, used for construction purposes, is a hydraulic binding agent with a composition by weight of at least 95% clinker and up to 5% of a minor component (usually calcium sulfate) which, when mixed with sand, stone or other aggregates and water, produces either concrete or mortar.
- **Petroleum coke (pet coke)** is a by-product of the oil refining coking process.
- **Ready-mix concrete** is a mixture of cement, aggregates, and water.
- **Tons** means metric tons. One metric ton equals 1.102 short tons.
- White cement is a specialty cement used primarily for decorative purposes.

#### **PART I**

### Item 1—Identity of Directors, Senior Management and Advisors

Not applicable.

### **Item 2—Offer Statistics and Expected Timetable**

Not applicable.

### **Item 3—Key Information**

#### **Summary of Most Important Transactions since the 2009 Refinancing**

On August 14, 2009, CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into a financing agreement (the "2009 Financing Agreement"), which extended the final maturities of approximately U.S.\$15 billion in syndicated and bilateral loans and private placement notes to February 14, 2014. On July 5, 2012, CEMEX, S.A.B. de C.V. and certain of its subsidiaries launched an exchange offer and consent request (the "2012 Exchange Offer and Consent Request"), to eligible creditors under the 2009 Financing Agreement pursuant to which eligible creditors were requested to consent to certain amendments to the 2009 Financing Agreement (together, the "2012 Amendment Consents"). In addition, CEMEX, S.A.B. de C.V. and certain of its subsidiaries offered to exchange the indebtedness owed to such creditors under the 2009 Financing Agreement that were eligible to participate in the 2012 Exchange Offer and Consent Request (the "Participating Creditors") for (i) new loans (or, in the case of the private placement notes, new private placement notes) or (ii) up to U.S.\$500 million of CEMEX, S.A.B. de C.V.'s 9.50% Senior Secured Notes due 2018 issued on September 17, 2012 (the "June 2018 U.S. Dollar Notes"), in each case, in transactions exempt from registration under the Securities Act of 1933, as amended (the "Securities Act").

On September 17, 2012, CEMEX, S.A.B. de C.V. and certain of its subsidiaries successfully completed the refinancing transactions contemplated by the 2012 Exchange Offer and Consent Request (collectively, the "2012 Refinancing Transaction"), and CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into (a) an amendment and restatement agreement, dated September 17, 2012 (the "2012 Amendment and Restatement Agreement"), pursuant to which the 2012 Amendment Consents with respect to the 2009 Financing Agreement were given effect, and (b) a facilities agreement, dated September 17, 2012 (as amended from time to time, the "2012 Facilities Agreement"), pursuant to which CEMEX, S.A.B. de C.V. and certain of its subsidiaries were deemed to borrow loans from those Participating Creditors participating in the 2012 Exchange Offer and Consent Request in principal amounts equal to the principal amounts of indebtedness subject to the 2009 Financing Agreement that was extinguished by such Participating Creditors. As a result of the 2012 Refinancing Transaction, Participating Creditors received (i) approximately U.S.\$6,155 million in aggregate principal amount of new loans and new private placement notes and (ii) U.S.\$500 million aggregate principal amount of the June 2018 U.S. Dollar Notes. In addition, approximately U.S.\$525 million aggregate principal amount of loans and private placement notes, which had remained outstanding under the 2009 Financing Agreement as of September 17, 2012, were subsequently repaid in full, as a result of prepayments made in accordance with the 2012 Facilities Agreement.

On September 29, 2014, CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into a facilities agreement, as amended and restated (the "Credit Agreement") for U.S.\$1.35 billion with nine of the main lending banks from its 2012 Facilities Agreement. On November 3, 2014, five additional banks joined the Credit Agreement as lenders with aggregate commitments of U.S.\$515 million, increasing the total amount of the Credit Agreement from U.S.\$1.35 billion to U.S.\$1.87 billion (increasing the revolving tranche of the Credit Agreement proportionally to U.S.\$746 million).

On July 30, 2015, CEMEX, S.A.B. de C.V. repaid in full the total amount outstanding of approximately U.S.\$1.94 billion under the 2012 Facilities Agreement with new funds from 17 financial institutions, which joined new tranches under the Credit Agreement.

In February 2016, CEMEX, S.A.B. de C.V. and certain of its subsidiaries launched a consent request to lenders under the Credit Agreement, pursuant to which lenders were requested to consent to certain amendments to the Credit Agreement, including certain amendments in relation to the implementation of CEMEX's plan to divest certain assets in the Philippines, certain amendments to financial covenants, and other related technical amendments (together, the "2016 Credit Agreement Amendments"). On March 7, 2016, CEMEX, S.A.B. de C.V. and certain of its subsidiaries obtained the requisite consents from lenders under the Credit Agreement to make the 2016 Credit Agreement Amendments. The 2016 Credit Agreement Amendments became effective when certain customary conditions precedent were fulfilled on March 17, 2016.

On July 12, 2016, International Finance Corporation ("IFC") joined the Credit Agreement as a lender granting CEMEX a loan of €106 million to support CEMEX's sustainable investment programs in emerging markets. The funds will support CEMEX projects designed to enhance environmental performance with 60% of the funds allocated for projects relating to the reduction of CEMEX's greenhouse gas emissions.

On November 30, 2016, CEMEX, S.A.B. de C.V. prepaid U.S.\$373 million outstanding under the Credit Agreement and corresponding to the September 2017 amortization thereunder. With this prepayment, and as part of an agreement reached with a group of existing lenders under the Credit Agreement, U.S.\$664 million (Ps13,758 million) of funded commitments maturing in 2018 were exchanged into a revolving facility, maintaining their original amortization schedule and the same terms and conditions. As of December 31, 2016, total commitments under the Credit Agreement included (i) approximately €746 million (approximately U.S.\$785 million or approximately Ps16,259 million) and (ii) approximately U.S.\$2,826 million (Ps58,555 million), out of which about U.S.\$1,413 million (Ps29,277 million) were in the revolving credit facility. The Credit Agreement currently has an amortization profile, considering all commitments, of approximately U.S.\$783 million in 2018, U.S.\$883 million in 2019 and U.S.\$1,096 million in 2020. See note 16A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

CEMEX, S.A.B. de C.V. and certain of its subsidiaries have pledged under pledge agreements or transferred to a trustee under a security trust substantially all the shares of CEMEX México, S.A. de C.V. ("CEMEX México"), Cemex Operaciones México, S.A. de C.V. ("Cemex Operaciones México"), CEMEX TRADEMARKS HOLDING Ltd. ("CTH"), New Sunward Holding B.V. ("New Sunward"), and CEMEX España, S.A. ("CEMEX España"), as collateral (together, the "Collateral"), and all proceeds of such Collateral, to secure our payment obligations under the Credit Agreement, the Senior Secured Notes (as defined herein) and under several other financing arrangements. These subsidiaries whose shares were pledged or transferred as part of the Collateral collectively own, directly or indirectly, substantially all our operations worldwide. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—We pledged the capital stock of subsidiaries that represent substantially all of our business as collateral to secure our payment obligations under the Credit Agreement, the Senior Secured Notes and other financing arrangements."

Since 2009, CEMEX, S.A.B. de C.V. and certain of its subsidiaries have completed a number of capital markets transactions, the majority of the proceeds of which have been used to repay indebtedness, to improve our liquidity position and for general corporate purposes. The most relevant capital markets transactions we completed consisted of:

- in September 2009, the sale of a total of 1,495 million CPOs, directly or in the form of American Depositary Shares of CEMEX, S.A.B. de C.V. ("ADSs"), in a global offering for approximately U.S.\$1.8 billion in net proceeds;
- in December 2009 and January 2010, the issuance by CEMEX Finance LLC of U.S.\$1.75 billion aggregate principal amount of its 9.50% U.S. Dollar-Denominated Senior Secured Notes due 2016 and €350 million aggregate principal amount of its 9.625% Euro-Denominated Senior Secured Notes due 2017;

- in December 2009, the issuance by CEMEX, S.A.B. de C.V. of approximately Ps4.1 billion (approximately U.S.\$315 million) of 10% mandatory convertible notes due 2019 (the "November 2019 Mandatory Convertible Mexican Peso Notes"), in exchange for promissory notes previously issued by CEMEX, S.A.B. de C.V. in the Mexican capital markets (Certificados Bursátiles) ("CBs") with maturities between 2010 and 2012;
- in March 2010, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$715 million aggregate principal amount of its 4.875% Convertible Subordinated Notes due 2015, including the full exercise of the U.S.\$65 million over-allotment option granted to the initial purchasers of the notes (the "March 2015 Optional Convertible Subordinated U.S. Dollar Notes");
- in May 2010, the issuance by CEMEX España, acting through its Luxembourg branch, of U.S.\$1,067,665,000 aggregate principal amount of its 9.25% U.S. Dollar-Denominated Senior Secured Notes due 2020 and €115,346,000 aggregate principal amount of its 8.875% Euro-Denominated Senior Secured Notes due 2017, in exchange for the U.S. Dollar-Denominated 6.196% Fixed-to-Floating Rate Callable Perpetual Debentures issued by C5 Capital (SPV) Limited, U.S. Dollar-Denominated 6.640% Fixed-to-Floating Rate Callable Perpetual Debentures issued by C8 Capital (SPV) Limited, U.S. Dollar-Denominated 6.722% Fixed-to-Floating Rate Callable Perpetual Debentures issued by C10 Capital (SPV) Limited and Euro-Denominated 6.277% Fixed-to-Floating Rate Callable Perpetual Debentures"), pursuant to a private placement exchange offer directed to the holders of Perpetual Debentures;
- in January 2011, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1.0 billion aggregate principal amount of its 9.000% Senior Secured Notes due 2018 (the "January 2018 U.S. Dollar Notes");
- in March 2011, the issuance by CEMEX España, acting through its Luxembourg branch, of an additional U.S.\$125,331,000 aggregate principal amount of its 9.25% U.S. Dollar-Denominated Senior Secured Notes due 2020;
- in March 2011, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1,667.5 million aggregate principal amount of its 3.250% Convertible Subordinated Notes due 2016 (the "March 2016 Optional Convertible Subordinated U.S. Dollar Notes") and 3.750% Convertible Subordinated Notes due 2018 (the "March 2018 Optional Convertible Subordinated U.S. Dollar Notes");
- in April 2011, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$800 million aggregate principal amount of its Floating Rate Senior Secured Notes due 2015;
- in July 2011, the issuance by CEMEX, S.A.B. de C.V. of an additional U.S.\$650 million aggregate principal amount of its January 2018 U.S. Dollar Notes;
- in March 2012, the issuance by CEMEX España, acting through its Luxembourg branch, of U.S.\$703,861,000 aggregate principal amount of its 9.875% U.S. Dollar-Denominated Senior Secured Notes Due 2019 (the "April 2019 U.S. Dollar Notes") and €179,219,000 aggregate principal amount of its 9.875% Euro-Denominated Senior Secured Notes Due 2019 (the "April 2019 Euro Notes" and, together with the April 2019 U.S. Dollar Notes, the "April 2019 U.S. Dollar and Euro Notes"), in exchange for Perpetual Debentures and 4.75% Notes due 2014 (the "Eurobonds") issued by CEMEX Finance Europe B.V. pursuant to separate private placement exchange offers directed to the holders of Perpetual Debentures and Eurobonds;
- in September 2012, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$500 million aggregate principal amount of the June 2018 U.S. Dollar Notes;
- in October 2012, the issuance by CEMEX Finance LLC of U.S.\$1.5 billion aggregate principal amount of its 9.375% Senior Secured Notes due 2022 (the "October 2022 U.S. Dollar Notes");
- in November 2012, CEMEX Latam Holdings, S.A. ("CEMEX Latam"), a then wholly-owned subsidiary of CEMEX España, completed the sale of newly issued common shares in a concurrent

public offering to investors in Colombia and a private placement to eligible investors outside of Colombia (together, the "CEMEX Latam Offering"), representing approximately 26.65% of CEMEX Latam's outstanding common shares. CEMEX Latam's common shares are listed on the Colombian Stock Exchange (*Bolsa de Valores de Colombia S.A.*). The net proceeds to CEMEX Latam from its public offering were approximately U.S.\$960 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CEMEX Latam. CEMEX Latam used the net proceeds from the offering to repay a portion of the indebtedness owed to us, which we used for general corporate purposes, including the repayment of indebtedness. CEMEX Latam is the holding company for CEMEX's operations in Brazil, Colombia, Costa Rica, Guatemala, Nicaragua, Panama and El Salvador. As of December 31, 2016, CEMEX España owned approximately 73.31% of CEMEX Latam's outstanding common shares, excluding shares held in treasury;

- in March 2013, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$600 million aggregate principal amount of its 5.875% Senior Secured Notes due 2019;
- in August 2013, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1.0 billion aggregate principal amount of its 6.5% Senior Secured Notes due 2019 (the "December 2019 U.S. Dollar Notes");
- in October 2013, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1.0 billion aggregate principal amount of its 7.25% Senior Secured Notes due 2021 (the "January 2021 U.S. Dollar Notes") and U.S.\$500 million aggregate amount of its Floating Rate Senior Secured Notes due 2018 (the "October 2018 U.S. Dollar Notes" and, together with the January 2021 U.S. Dollar Notes, the "January 2021 and October 2018 U.S. Dollar Notes");
- in April 2014, CEMEX Finance LLC issued U.S.\$1.0 billion aggregate principal amount of its 6.000% U.S. Dollar-Denominated Senior Secured Notes due 2024 (the "April 2024 U.S. Dollar Notes") and €400 million aggregate principal amount of its 5.250% Euro-Denominated Senior Secured Notes due 2021 (the "April 2021 Euro Notes" and, together with the April 2024 U.S. Dollar Notes, the "April 2024 U.S. Dollar and April 2021 Euro Notes");
- in September 2014, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1.1 billion aggregate principal amount of its 5.7% Senior Secured Notes due 2025 (the "January 2025 U.S. Dollar Notes") and €400 million aggregate principal amount of its 4.750% Senior Secured Notes due 2022 (the "January 2022 Euro Notes" and, together with the January 2025 U.S. Dollar Notes, the "January 2025 U.S. Dollar and January 2022 Euro Notes");
- in October 2014, the private offering by CEMEX, S.A.B. de C.V. of 200,000 Contingent Convertible Units ("CCUs"), each with a stated amount of U.S.\$1,000. The proceeds of the CCUs were applied to subscribe for the First March 2020 Optional Convertible Subordinated U.S. Dollar Notes (as defined below), the proceeds of which, in turn, were used to finance payment of U.S.\$200 million of the principal amount of the March 2015 Optional Convertible Subordinated U.S. Dollar Notes that matured without conversion;
- in March 2015, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$750 million aggregate principal amount of its 6.125% Senior Secured Notes due 2025 (the "May 2025 U.S. Dollar Notes") and €550 million aggregate amount of its 4.375% Senior Secured Notes due 2023 (the "March 2023 Euro Notes" and, together with the May 2025 U.S. Dollar Notes, the "May 2025 U.S. Dollar and March 2023 Euro Notes"):
- in March 2015, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$200 million aggregate principal amount of its 3.72% Convertible Subordinated Notes due March 2020 (the "First March 2020 Optional Convertible Subordinated U.S. Dollar Notes") subscribed with the proceeds of the CCUs;
- in May 2015, a series of private exchange transactions by CEMEX, S.A.B. de C.V. in respect of U.S.\$626 million aggregate principal amount of its March 2016 Optional Convertible Subordinated U.S. Dollar Notes held by certain institutional investors for (i) U.S.\$321 million aggregate principal

- amount of its 3.72% Convertible Subordinated Notes due March 2020 (the "Second March 2020 Optional Convertible Subordinated U.S. Dollar Notes" and, together with the First March 2020 Optional Convertible Subordinated U.S. Dollar Notes, the "March 2020 Optional Convertible Subordinated U.S. Dollar Notes") and (ii) an estimated 42 million ADSs;
- in March 2016, the repayment of the full outstanding amount (U.S.\$352 million) of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes;
- in March 2016, the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1.0 billion aggregate principal amount of its 7.75% Senior Secured Notes due 2026 (the "April 2026 U.S. Dollar Notes"). A portion of the net proceeds from the offering of the April 2026 U.S. Dollar Notes of approximately U.S.\$830 million were used to fund the redemption of the remaining April 2019 U.S. Dollar and Euro Notes (such redemption, the "April 2019 U.S. Dollar and Euro Notes Redemption"), and the remaining net proceeds from the issuance of the April 2026 U.S. Dollar Notes were used to fund the redemption of the remaining June 2018 U.S. Dollar Notes (the "June 2018 U.S. Dollar Notes Redemption");
- in April 2016, CEMEX España, acting through its Luxembourg branch, issued an irrevocable notice of redemption with respect to the April 2019 U.S. Dollar and Euro Notes, pursuant to which it redeemed the remaining U.S.\$603.7 million aggregate principal amount of the April 2019 U.S. Dollar Notes;
- in April 2016, the cancelation of U.S.\$217.3 million aggregate principal amount of Perpetual Debentures;
- in May 2016, the cancelation of U.S.\$7.8 million and €6.1 million aggregate principal amount of Perpetual Debentures;
- in May 2016, the purchase of approximately U.S.\$178.5 million aggregate principal amount of the October 2018 U.S. Dollar Notes and U.S.\$218.9 million aggregate principal amount of the December 2019 U.S. Dollar Notes through a cash tender offer (the "May 2016 Tender Offer");
- in June 2016, the issuance by CEMEX Finance LLC of €400 million of 4.625% Senior Secured Notes due 2024 denominated in Euros (the "June 2024 Euro Notes");
- in June 2016, the June 2018 U.S. Dollar Notes Redemption;
- in July 2016, the purchase of approximately U.S.\$355.3 million aggregate principal amount of the October 2022 U.S. Dollar Notes through a cash tender offer (the "July 2016 Tender Offer");
- in July 2016, CEMEX Holdings Philippines, Inc. ("CHP") closed its initial public offering of 45% of its common shares in the Philippines, and 100% of CHP's common shares started trading on the Philippine Stock Exchange under the ticker "CHP." CEMEX Asian South East Corporation ("CASE"), an indirect subsidiary of CEMEX España, directly owns approximately 55% of CHP's outstanding common shares. The net proceeds to CHP from its initial public offering were approximately U.S.\$506.8 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CHP. CHP used the net proceeds from the initial public offering to repay existing indebtedness owed to BDO Unibank, Inc. ("BDO Unibank") and to an indirect subsidiary of CEMEX;
- in August 2016, the redemption of the remaining 5.875% Senior Secured Notes due 2019;
- in October 2016, the purchase of approximately U.S.\$241.9 million aggregate principal amount of the January 2021 U.S. Dollar Notes through a cash tender offer (the "October 2016 Tender Offer"); and
- in 2016, the repurchase of U.S.\$198.5 million aggregate principal amount of the following Senior Secured Notes (all of which have been canceled):
  - U.S.\$2.1 million aggregate principal amount of June 2018 U.S. Dollar Notes;
  - U.S.\$46.1 million aggregate principal amount of CEMEX, S.A.B. de C.V.'s 5.875% Senior Secured Notes due 2019:

- U.S.\$61.0 million aggregate principal amount of December 2019 U.S. Dollar Notes;
- U.S.\$22.9 million aggregate principal amount of April 2019 U.S. Dollar Notes;
- U.S.\$28.9 million aggregate principal amount of October 2022 U.S. Dollar Notes;
- U.S.\$6.1 million aggregate principal amount of October 2018 U.S. Dollar Notes; and
- U.S.\$31.4 million aggregate principal amount of January 2021 U.S. Dollar Notes.

As of December 31, 2016, our reported total debt plus other financial obligations in our balance sheet were Ps273,862 million (U.S.\$13,217 million) (principal amount Ps276,716 million (U.S.\$13,355 million), excluding deferred issuance costs), which does not include approximately Ps9,075 million (U.S.\$438 million), which represents the nominal amount of outstanding Perpetual Debentures.

Since the beginning of 2017, we have engaged in the following significant capital markets transactions and debt related activities, which are not reflected in our 2016 audited consolidated financial statements included elsewhere in this annual report:

- in January 2017, in connection with the offer and takeover bid (the "Offer") by Sierra Trading ("Sierra"), one of CEMEX, S.A.B. de C.V.'s indirect subsidiaries, to all shareholders of Trinidad Cement Limited ("TCL"), a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL, Sierra presented a change and variation notice amending the Offer (the "Amended Offer"). Pursuant to the Amended Offer, Sierra offered 5.07 Trinidad and Tobago Dollars ("TT\$") in cash per TCL share (the "Revised Offer Price") and, except for shareholders of TCL in Barbados, shareholders of TCL were granted the option of being paid in either TT\$ or U.S.\$ in Trinidad, and Jamaican Dollars or U.S.\$ in Jamaica. The Revised Offer Price represented a premium of 50% over the December 1, 2016 closing price of TCL's shares on the Trinidad and Tobago Stock Exchange. The total number of TCL shares tendered and accepted in response to the Offer was 113,629,723 which, together with Sierra's pre-existing shareholding in TCL (147,994,188 shares), represent approximately 69.83% of the outstanding TCL shares. The total cash payment by Sierra for the tendered shares was approximately U.S.\$86.36 million. CEMEX started consolidating TCL for financial reporting purposes on February 1, 2017. TCL has de-listed from the Jamaica and Barbados stock exchanges.
- in February 2017, CHP announced that it had entered into a senior unsecured peso term loan facility agreement with BDO Unibank for a Philippine Peso denominated amount equal to approximately U.S.\$280 million, to refinance a majority of CHP's outstanding long-term loan with New Sunward. The term loan provided by BDO Unibank has a tenor of seven years and consists of a fixed rate tranche and a floating rate tranche. CHP drew the full amount of the term loan during the first quarter of 2017 to repay a portion of its existing indebtedness as described below.
- in February 2017, we sold 45,000,000 shares of common stock of Grupo Cementos de Chihuahua, S.A.B. de C.V. ("GCC") at a price of Ps95 per share in a public offering to investors in Mexico authorized by the *Comisión Nacional Bancaria y de Valores* (Mexican National Banking and Securities Commission) (the "CNBV") and in a concurrent private placement to eligible investors outside of Mexico. Prior to the offerings, CEMEX, S.A.B. de C.V. owned a 23% direct interest in GCC and a minority interest in CAMCEM, an entity which owns a majority interest in GCC. After the offerings, CEMEX, S.A.B. de C.V. owned a 9.47% direct interest in GCC and a minority interest in CAMCEM.
- in March 2017, the purchase of U.S.\$89.9 million aggregate principal amount of the December 2019
   U.S. Dollar Notes and U.S.\$385.1 million aggregate principal amount of the January 2021 U.S. Dollar
   Notes through a cash tender offer and, during the first quarter of 2017, the open market repurchase of
   U.S.\$9 million aggregate principal amount of the Senior Secured Notes (all of which have been
   canceled).

• in the first quarter of 2017, drawdowns and repayments under the revolving tranche of the Credit Agreement resulting in a reduction of Ps11,686 million (U.S.\$564 million) of outstanding indebtedness under the revolving tranche of the Credit Agreement, which was financed primarily from the proceeds of our asset divestitures. As of March 31, 2017, we had an aggregate amount of Ps43,407 million (U.S.\$1,413 million) available under the revolving tranche of our Credit Agreement.

We refer to the October 2018 U.S. Dollar Notes, December 2019 U.S. Dollar Notes, January 2021 U.S. Dollar Notes, April 2021 Euro Notes, January 2022 Euro Notes, October 2022 U.S. Dollar Notes, March 2023 Euro Notes, April 2024 U.S. Dollar Notes, June 2024 Euro Notes, January 2025 U.S. Dollar Notes, May 2025 U.S. Dollar Notes and April 2026 U.S. Dollar Notes collectively, as the "Senior Secured Notes." For a more detailed description of these transactions, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments."

As of March 31, 2017, our total debt plus other financial obligations were Ps237,459 million (U.S.\$12,678 million) (principal amount Ps239,781 million (U.S.\$12,802 million)), which does not include approximately Ps8,222 million (U.S.\$439 million), which represents the nominal amount of Perpetual Debentures.

#### **Risk Factors**

We are subject to various risks mainly resulting from changing economic, environmental, political, industry, business, financial and climate conditions. The following risk factors are not the only risks we face, and any of the risk factors described below could significantly and adversely affect our business, results of operations or financial condition.

#### Risks Relating To Our Business

Economic conditions in some of the countries where we operate may adversely affect our business, financial condition and results of operations.

The economic conditions in some of the countries where we operate have had and may continue to have a material adverse effect on our business, financial condition and results of operations throughout our operations worldwide. Our results of operations are highly dependent on the results of our operating subsidiaries mainly in the United States, Mexico, South, Central America and the Caribbean ("SAC"), Europe, Asia, Middle East and Africa. Accordingly, the economic conditions in some of the countries where we operate have had and may continue to have a material adverse effect on our business, financial condition and results of operations throughout our operations worldwide.

The main sources of risks in the current global economy are: (i) an inward shift in political activities, including toward protectionism, which may lead to lower global growth caused by reduced trade and crossborder investment flows, (ii) a faster-than-expected pace of interest rate increases in the United States, which could trigger a more rapid tightening in global financial conditions and a sharp Dollar appreciation, and its impact on the global economy, emerging markets, risk aversion, foreign exchange markets, volatility and financial markets, (iii) economic vulnerability of emerging market economies, (iv) uncertainty about the performance of oil prices, (v) China's economic performance and the ability of the Chinese authorities to manage an economic transition and vulnerabilities in China's financial system associated with fast credit growth, (vi) economic and political uncertainties in Europe, including the United Kingdom's decision to withdraw from the European Union ("EU"), electoral processes in France, Germany and Italy, the ongoing refugee crisis, financial uncertainty in Greece and a lack of confidence in the EU's banking system, that may threaten the region's integration and economic growth and (vii) geopolitical risks in the Middle East and other regions experiencing political turmoil.

The U.S. economy continues to grow at near trend pace. The U.S. Federal Reserve System increased short-term interest rates in December 2015, December 2016 and March 2017. There is a risk that further interest rate hikes could cause Dollar appreciation, a manufacturing slowdown and economic deceleration. On the other hand,

a slower than warranted pace of increase in interest rates could result in inflation acceleration and the disanchoring of inflation expectations leading to swift monetary policy tightening and a potential recession. The housing sector supply constraints associated in part with labor shortages could result in a slower pace of growth in housing starts. Federal budget disputes could lead to lesser than FAST Act-authorization spending levels for highways and roads. The global risks mentioned herein could lead to market volatility and consumer spending retrenchment in the U.S. The U.S. presidential election of Donald Trump has increased uncertainty about key policies, such as trade (potential protectionism and re-negotiation of the North American Free Trade Agreement ("NAFTA")), immigration (anti-immigration rhetoric and a stated intention to build a wall on the border with Mexico) or fiscal (stated intentions to reduce tax rates and increase infrastructure expenditures) policy. In particular, there is uncertainty around the implications of a tax reform for the fiscal deficit and national debt. All of these uncertainties can have a significant impact on CEMEX's business, both in the United States and worldwide.

Many emerging market economies have undergone periods of financial volatility over the past few years. Some large commodity exporters and other stressed economies have also experienced substantial exchange rate movements. The tightening of financial conditions across emerging market economies in the immediate aftermath of the U.S. elections in 2016 is a reminder that many countries from this group remain vulnerable to sudden shifts in global market sentiment. There is a risk of new episodes of market volatility, increased risk aversion and capital outflows from emerging markets, which could cause emerging markets currencies to further depreciate. The high level of U.S. Dollar denominated corporate indebtedness in emerging markets constitutes an additional source of instability. Emerging markets would face higher global risk premiums and substantial capital outflows, putting particular pressure on economies with domestic debt imbalances. The risk of contagion effect across emerging markets could be significant.

Chinese authorities are expected to maintain emphasis on protecting macroeconomic stability in the run-up to the leadership transition in 2017. Progress with demand-side rebalancing and reduction of excess industrial capacity has continued, but so has the reliance on stimulus measures to maintain high rates of growth and the Chinese economy's dependence on rapidly expanding credit, intermediated through an increasingly opaque and complex financial system. Recent months have seen a return of capital outflows, reflecting market expectations of renminbi depreciation against the Dollar and narrowing yield. External triggers, such as a shift toward protectionism in advanced economies or domestic shocks, could lead to a broader tightening of financial conditions in China. Such tightening could be exacerbated by capital outflow pressures, causing an adverse impact on demand and output. The consequences for emerging market economies of weaker economic performance and increased policy uncertainty in China could be significant (as demonstrated by market fluctuations in the second half of 2015 and early 2016, spillovers from turbulence in China into other economies can be significant, operating mainly through commodity prices and global financial risk aversion).

Since the start of 2016, the Mexican economy has been immersed in an atmosphere of uncertainty. Concerns grew about Mexico's fiscal accounts amid high public expenditure, falling oil revenues and increased cost of debt as monetary policy began a path towards normalization. Also, manufacturing lost steam as external demand waned and doubts emerged about whether private consumption could remain solid in a prolonged period of industrial fragility. Additionally, worries arose that steep depreciation of the Mexican Peso could eventually lead to higher inflation and, accordingly, to higher interest rates. This uncertainty reached new heights after the conclusion of the U.S. elections in late 2016. Protectionist stances, previously subdued, emerged as a significant risk for future economic growth. In the case of Mexico, a potential overhaul or repeal of NAFTA poses a threat to exports, foreign and domestic investment and job creation (especially of relatively high-paying jobs). Furthermore, remittance inflows became vulnerable to potential taxes and tighter immigration controls in the U.S. Confidence indicators declined, the Mexican Peso plummeted, and analysts revised downwardly their

<sup>&</sup>lt;sup>1</sup> The Mexican Peso depreciated against the U.S. Dollar by approximately 20% in 2016. However, between January 1, 2017 and April 21, 2017, the Peso appreciated by approximately 9%. See "Item 3—Key Information—Selected Consolidated Financial Information." So far, the adjustment has happened orderly, with liquidity prevailing in market operations. Currently, Peso-denominated government bonds held by non-residents have remained stable.

forecasts of Mexico's GDP growth. Mexican authorities reassure its commitment to improving Mexico's fiscal position and to accelerated monetary tightening to prevent abnormal volatility of the Mexican Peso and capital outflows; however, additional depreciation of the Mexican Peso cannot be ruled out. Political tensions between Mexican and U.S. administrations appear to have diminished, and we expect changes to NAFTA to be less disruptive. This notwithstanding, it is too early to rule out an economic downturn, given that many of the aforementioned risks are still prevalent and definitive actions on crucial topics like NAFTA and immigration are pending.

In summary, the short-term risks for the Mexican economy are as follows: (i) Potential hardening of the U.S. stance on renegotiation of NAFTA could deter manufacturing activity and investment in Mexico and significantly decrease the value of the Mexican Peso. (ii) A possible tax or other restrictions on remittances and immigration in the United States could hinder private consumption in Mexico. (iii) Lower dynamism of car manufacturing and car sales in the United States could hold back the ongoing recovery of manufacturing in Mexico. (iv) Private consumption in Mexico could retreat amid each or several of the following: increased inflation (due to further gasoline price increases and sharper depreciation of the Mexican Peso), higher interest rates and/or extended weakness of the industrial sector. (v) The downward adjustment of international oil prices and the exacerbation of the decline in domestic oil production could negatively affect the Mexican economy. (vi) Further adjustment of the total fixed investment due to the adoption of tighter fiscal and monetary policies in Mexico could negatively affect the Mexican economy. (vii) A deterioration of Mexico's debt position could lead to a downgrade of Mexico's sovereign credit rating. (vii) New episodes of global risk aversion due to geopolitical instability could spur capital outflows and affect the value of the Mexican Peso.

In Colombia, the anticipated correction in domestic demand is occurring and its weakness is expected to persist in 2017. Macroeconomic imbalances are beginning to be corrected: inflation is decreasing (4.7% in March 2017), helped by the reversion of climatic shocks and the stabilization of the exchange rate; and the current account deficit is narrowing (4.5% of GDP) helped by the weakness of domestic demand. Nonetheless, inflation and current account remain above comfort levels. Colombia's approved fiscal reform was less "structural" than required, so there is a risk that another "fiscal reform" will be needed in 2018/19. The increase in value-added tax rate could have a negative impact on inflation and on private consumption, with domestic demand cooling off. The risk of protectionism in the U.S. could negatively impact on the Colombian economy. The risk of further depreciation of the Colombian Peso against the U.S. Dollar is non-negligible. A sudden stop of flows cannot be ruled out.

The European Central Bank (the "ECB") continued with the policy of monetary easing. The environment of negative deposit rates is distorting financial markets and creates uncertain consequences for the banking sector. There is a risk that negative rates will erode bank profitability and curb lending across the countries that currently use the Euro as their currency (the "Eurozone"), creating other systemic risks to European economies. The economic activity in the Eurozone started to recover last year and inflation expectations had recovered some of the ground lost since the summer of last year. However, it is too early to confirm that a turning point has been reached in underlying inflation. According to some analysts, it is expected that the ECB could announce a tapering process at the end of 2017. There is a risk, however, that the ECB concludes the policy of easing too early. Uncertainty about the Euro's performance remains.

The Eurozone's economic growth and European integration are challenged by a number of uncertainties, including (i) delays in implementing the needed structural reforms in some European countries, (ii) the political uncertainty regarding elections in France, Germany and Italy and their effects on the European integration, (iii) unresolved political and financial risks associated with Greece, (iv) uncertainty regarding the profitability of the European banking system in general and the Italian banking sector in particular, (v) the process of the United Kingdom's exit from the EU, and (vi) the ongoing refugee crisis. All these factors could impact market confidence and could limit the benefit of the economic tailwinds and monetary policy stimulus. Regarding our operations in Europe, the United Kingdom's expected exit from the EU is already affecting financial markets and increasing foreign exchange volatility. The United Kingdom's exit from the EU may have a significant adverse

impact on its economic activity. Such decision could result in substantial uncertainty weighing on investment and import cost. This situation could impact our business. In Poland, there is a risk that the populist measures of the new government could eventually restrain foreign investment and growth, which could negatively impact our operations in the region. In Spain, although political gridlock was overcome in the fourth quarter of 2016, the government is in minority and early elections cannot be ruled out.

Significant trade links with Western Europe render some of the Eastern European countries susceptible to economic and political pressures from Western Europe. Additionally, in the coming years, Central European countries might experience a reduction in the proceeds they receive from the EU's Structural Funds, which could hinder infrastructure investment in such countries.

In the Middle East, political risk could moderate economic growth and adversely affect construction investments. In Egypt, the current government has brought a certain degree of political stability to the country. During the last year, the government has undertaken several economic reforms to combat Egypt's economic imbalances including: (i) exchange rate liberalization (to face the shortage of foreign exchange and precariously low reserves), (ii) implementation of a VAT law (to increase fiscal revenues) and (iii) cuts in fuel subsidies (leading to a reduction of the budget deficit). In return, the Egyptian government obtained a loan from the Interntional Monetary Fund. Although these reforms improved Egypt's economic performance (reserves have significantly increased and the budget deficit is expected to improve), they are now negatively affecting Egypt's population. During 2016, the Egyptian pound ("EGP") reached 19.6 EGP per US\$1 (it depreciated by 120%) and inflation is growing at 30%. All this has also affected our business: there is a foreign exchange shortage for capital repatriation, and cement demand in the country has plummeted in the first quarter of 2017. In 2018, presidential elections are scheduled to occur, but there is a risk that the current president may try to avoid them, in which case a rebound of social unrest cannot be ruled out. In Israel, potential conflicts with Hamas in Gaza, that may affect our operations, cannot be ruled out.

In the Philippines, the latest presidential elections resulted in a new government markedly different from the previous one. Although the new government is more focused on security issues, it is also expected to be committed to the infrastructure projects needed in the country. However, there is a risk of underspending that could affect our projections of business growth.

Demand for our products is strongly related to construction levels and depends, in large part, on residential and commercial construction activity, as well as private and public infrastructure spending, in the countries where we operate. Public and private infrastructure spending in countries dependent on revenue generated by the energy sector is exposed to decreases in energy prices. Therefore, decreases in energy prices could affect public and private infrastructure spending which, in turn, could affect the construction industry. Declines in the construction industry are correlated with declines in general economic conditions. As a result, deterioration in economic conditions in the countries where we operate could have a material adverse effect on our business, financial condition and results of operations. In addition, we cannot assure you that growth in the gross domestic product of the countries where we operate will translate into a correlated increase in demand for our products.

### Concerns regarding the European debt crisis and market perception concerning the instability of the Euro could affect our operating profits.

We conduct business in many countries of the Eurozone. Although this risk appears to have declined, concerns persist regarding the debt burden of certain Eurozone countries, such as Greece, and their ability to meet future financial obligations, the overall stability of the Euro and the suitability of the Euro as a single currency given the diverse economic and political circumstances in individual Eurozone countries and the United Kingdom's decision to exit the EU.

These concerns could lead to the reintroduction of individual currencies in one or more Eurozone countries, or in more extreme circumstances, the possible dissolution of the Euro currency entirely. Should the Euro

dissolve entirely, the legal and contractual consequences for holders of Euro-denominated obligations would be determined by laws in effect at such time. These potential developments, or market perceptions concerning these and related issues, could adversely affect the value of our Euro-denominated assets and obligations. In addition, concerns over the effect of this financial crisis on financial institutions in Europe and globally could have an adverse effect on the global capital markets, and more specifically on our ability, and the ability of our customers, suppliers and lenders to finance their respective businesses, to access liquidity at acceptable financing costs, if at all, and on the demand for our products.

We are subject to the effects of general global economic and market conditions that are beyond our control. If these conditions remain challenging or deteriorate, our business, financial condition and results of operations could be adversely affected. Possible consequences from macroeconomic global challenges such as the debt crisis in certain countries in the EU could have an adverse impact on our business, financial condition and results of operations.

### The Credit Agreement contains several restrictions and covenants. Our failure to comply with such restrictions and covenants could have a material adverse effect on our business and financial conditions.

The Credit Agreement requires us to comply with several financial ratios and tests, including a minimum consolidated coverage ratio of Operating EBITDA to interest expense (including interest accrued on Perpetual Debentures) and a maximum consolidated leverage ratio of total debt (including Perpetual Debentures and guarantees, excluding subordinated optional convertible securities and financial leases plus or minus the fair value of derivative financial instruments, among other adjustments) to Operating EBITDA, as described below. Our ability to comply with these ratios may be affected by economic conditions and volatility in foreign exchange rates, as well as by overall conditions in the financial and capital markets and the construction sector.

On March 17, 2016, CEMEX, S.A.B. de C.V., in line with CEMEX's initiatives of enhancing financial flexibility and reducing risk, obtained the required consents to amend its Credit Agreement, in order to delay the scheduled tightening in its consolidated financial leverage and coverage ratio limits by one year. Pursuant to the amendment, the leverage ratio covenant in the Credit Agreement remained at 6.0 times until and including March 31, 2017, and will gradually decline to 4.0 times by June 30, 2020, and the margin grid in the Credit Agreement was modified such that if the consolidated leverage ratio is greater than 5.50 times in the reference periods ending on December 31, 2016, March 31, 2017, June 30, 2017, and September 30, 2017, the applicable margin will be 425 bps instead of 400 bps. All other levels in the margin grid remained unchanged. In addition, the Credit Agreement was amended to allow CEMEX the right, subject to meeting local requirements in the Philippines, to sell a minority stake in CHP.

The Credit Agreement requires us to comply with a consolidated coverage ratio of Operating EBITDA to interest expense (including interest accrued on Perpetual Debentures), for the following periods, measured quarterly, of not less than (i) 1.85:1 for the period ending December 31, 2016, up to and including the period ending March 31, 2017, (ii) 2:00:1 for the period ending on June 30, 2017 up to and including the period ending on September 30, 2017 and (iii) 2.25:1 for the period ending December 31, 2017, and each subsequent reference period. In addition, the Credit Agreement allows us a maximum consolidated leverage ratio of total debt (including Perpetual Debentures and guarantees, excluding subordinated optional convertible securities and financial leases plus or minus the fair value of derivative financial instruments, among other adjustments) to Operating EBITDA for each period of four consecutive fiscal quarters (measured quarterly) not to exceed (i) 6.00:1 for the period ending December 31, 2016, up to and including the period ending on March 31, 2017, (ii) 5.75:1 for the period ending June 30, 2017, up to and including the period ending September 30, 2017, (iii) 5.50:1 for the period ending December 31, 2017, up to and including the period ending March 31, 2018, (iv) 5.25:1 for the period ending June 30, 2018, up to and including the period ending September 30, 2018; (v) 5.00:1 for the period ending December 31, 2018, up to and including the period ending March 31, 2019; (vi) 4.50:1 for the period ending June 30, 2019, up to and including the period ending September 30, 2019; (vii) 4.25:1 for the period ending December 31, 2019, up to and including the period ending March 31, 2020; and (viii) 4.00:1 for the period ending June 30, 2020 and each subsequent reference period. For the period ended December 31, 2016, we reported to the lenders under the Credit Agreement a consolidated coverage ratio of 3.18 and a consolidated leverage ratio of 4.22, each as calculated pursuant to the Credit Agreement. See "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Our Indebtedness."

Pursuant to the Credit Agreement, we are limited in relation to making aggregate annual capital expenditures in excess of U.S.\$1 billion (excluding certain capital expenditures, joint venture investments and acquisitions to be made by each of CEMEX Latam and/or CHP and their respective subsidiaries), which capital expenditures, joint venture investments and acquisitions at any time then incurred are subject to a separate aggregate limit of U.S.\$500 million (or its equivalent) for each of CEMEX Latam and its subsidiaries and CHP and its subsidiaries, in each case, the amounts of which allowed for permitted acquisitions and investments in joint ventures cannot exceed U.S.\$400 million per year.

We are also subject to a number of negative covenants under the Credit Agreement that, among other things, restrict or limit our ability to: (i) create liens; (ii) incur additional debt; (iii) change our business or the business of any obligor or material subsidiary (in each case, as defined in the Credit Agreement); (iv) enter into mergers; (v) enter into agreements that restrict our subsidiaries' ability to pay dividends or repay intercompany debt; (vi) acquire assets; (vii) enter into or invest in joint venture agreements; (viii) dispose of certain assets; (ix) grant additional guarantees or indemnities; (x) declare or pay cash dividends or make share redemptions; (xi) enter into certain derivatives transactions; and (xii) exercise any call option in relation to any perpetual bonds we issue unless the exercise of the call options does not have a materially negative impact on our cash flow.

The Credit Agreement also contains a number of affirmative covenants that, among other things, require us to provide periodic financial information to our creditors. Pursuant to the Credit Agreement, however, a number of those covenants and restrictions will, if CEMEX so elects, automatically cease to apply or become less restrictive if (i) our consolidated leverage ratio for the two most recently completed quarterly testing periods is less than 4.00:1; and (ii) no default under the Credit Agreement is continuing, as applicable. At that point, the consolidated leverage ratio must not exceed 4.25:1. Restrictions that will cease to apply when we satisfy such conditions include the capital expenditure limitations mentioned above and several negative covenants, including limitations on our ability to repay existing financial indebtedness, declare or pay cash dividends and distributions to shareholders; certain asset sale restrictions, and restrictions on exercising call options in relation to any perpetual bonds we issue and on the issuance of certain convertible and exchangeable obligations. At such time, several baskets and caps relating to negative covenants will also increase, including baskets or caps related to permitted financial indebtedness, permitted guarantees and limitations on liens. However, we cannot assure you that we will be able to meet the conditions for these restrictions to cease to apply prior to the final maturity date under the Credit Agreement.

The Credit Agreement contains events of default, some of which may be outside of our control. Such events of default include defaults, subject to certain exceptions, based on (i) non-payment of principal, interest, or fees when due; (ii) material inaccuracy of representations and warranties; (iii) breach of covenants; (iv) bankruptcy (quiebra) or insolvency (concurso mercantil) of CEMEX, S.A.B. de C.V., any other obligor under the Credit Agreement or any other of our material subsidiaries (as defined in the Credit Agreement); (v) inability to pay debts as they fall due or by reason of actual financial difficulties, suspension or threatened suspension of payments on debts exceeding U.S.\$50 million or commencement of negotiations to reschedule debt exceeding U.S.\$50 million; (vi) a cross-default in relation to financial indebtedness in excess of U.S.\$50 million; (vii) a change of control with respect to CEMEX, S.A.B. de C.V.; (viii) certain changes to the ownership of any of the obligors under the Credit Agreement, unless the proceeds of such disposal are used to prepay the Credit Agreement debt; (ix) enforcement of the share security; (x) final judgments or orders in excess of U.S.\$50 million that are neither discharged nor bonded in full within 60 days thereafter; (xi) restrictions not in effect on September 29, 2014 are imposed that limit the ability of obligors to transfer foreign exchange for purposes of performing material obligations under the Credit Agreement; (xii) any material adverse change arising in the financial condition of CEMEX, which two thirds or more of the Credit Agreement's creditors

determine would result in our failure, taken as a whole, to perform payment obligations under the Credit Agreement; and (xiii) failure to comply with laws or our obligations under the Credit Agreement cease to be legal. If an event of default occurs and is continuing, upon the authorization of two thirds or more of the Credit Agreement creditors, the creditors have the ability to accelerate all outstanding amounts due under the Credit Agreement. Acceleration is automatic in the case of insolvency.

We cannot assure you that we will be able to comply with the restrictive covenants and limitations contained in the Credit Agreement. Our failure to comply with such covenants and limitations could result in an event of default, which could materially and adversely affect our business, financial condition and results of operation.

We pledged the capital stock of subsidiaries that represent substantially all of our business as collateral to secure our payment obligations under the Credit Agreement, the Senior Secured Notes and other financing arrangements.

CEMEX, S.A.B. de C.V. and certain of its subsidiaries have pledged under pledge agreements or transferred to a trustee under a security trust substantially all the shares of CEMEX México, Cemex Operaciones México, CTH, New Sunward, and CEMEX España as Collateral and all proceeds of the Collateral to secure our payment obligations under the Credit Agreement, the Senior Secured Notes and under a number of other financing arrangements for the benefit of the creditors and holders of debt, and other obligations that benefit from provisions in their instruments requiring that their obligations be equally and ratably secured.

As of March 31, 2017, the Collateral and all proceeds of such Collateral secured (i) Ps190,147 million (U.S.\$10,152 million) (principal amount Ps191,720 million (U.S.\$10,236 million)) of debt under the Credit Agreement, the Senior Secured Notes and other financing arrangements and (ii) Ps8,222 million (U.S.\$439 million) aggregate principal amount of Perpetual Debentures. These subsidiaries collectively own, directly or indirectly, substantially all of our operations worldwide. Provided that no default has occurred which is continuing under the Credit Agreement, the Collateral will be released automatically if we meet specified debt reduction and financial covenant targets.

We have a substantial amount of debt and other financial obligations maturing in the next several years. If we are unable to secure refinancing on favorable terms or at all, we may not be able to comply with our upcoming payment obligations. Our ability to comply with our principal maturities and financial covenants may depend on us making asset sales, and there is no assurance that we will be able to execute such sales on terms favorable to us or at all.

As of March 31, 2017, our total debt plus other financial obligations were Ps237,459 million (U.S.\$12,678 million) (principal amount Ps239,781 million (U.S.\$12,802 million)), which does not include approximately Ps8,222 million (U.S.\$439 million), which represents the nominal amount of Perpetual Debentures. Of such total debt plus other financial obligations amount, Ps1,929 million (U.S.\$103 million) (principal amount Ps1,910 million (U.S.\$102 million)) matures during 2017; Ps32,871 million (U.S.\$1,755 million) (principal amount Ps33,414 million (U.S.\$1,784 million)) matures during 2018; Ps29,387 million (U.S.\$1,569 million) (principal amount Ps29,668 million (U.S.\$1,584 million)) matures during 2019; Ps32,047 million (U.S.\$1,711 million) (principal amount Ps32,553 million (U.S.\$1,738 million)) matures during 2020; and Ps141,225 million (U.S.\$7,540 million) (principal amount Ps142,236 million (U.S.\$7,594 million)) matures after 2020.

If we are unable to comply with our upcoming principal maturities under our indebtedness, or refinance or extend maturities of our indebtedness, our debt could be accelerated. Acceleration of our debt would have a material adverse effect on our business, financial condition and results of operations. As a result of the restrictions under the Credit Agreement, the indentures that govern our Senior Secured Notes and other debt instruments, the current global economic environment and uncertain market conditions, we may not be able to complete asset sales on terms that we find economically attractive or at all. Volatility in the credit and capital

markets could significantly affect us due to its effect on the availability of funds to potential acquiring parties, including industry peers. In addition, high levels of consolidation in our industry in some jurisdictions may further limit potential assets sales to interested parties due to antitrust considerations. If we are unable to complete asset sales and our cash flow or capital resources prove inadequate, we could face liquidity problems and may not be able to comply with financial covenants and payment obligations under our indebtedness.

In addition, our levels of debt, contractual restrictions, and our need to deleverage may limit our planning flexibility and our ability to react to changes in our business and the industry, and may place us at a competitive disadvantage compared to competitors who may have lower leverage ratios and fewer contractual restrictions. There can also be no assurance that, because of our high leverage ratio and contractual restrictions, we will be able to maintain our operating margins and deliver financial results comparable to the results obtained in the past under similar economic conditions.

We may not be able to generate sufficient cash to service all of our indebtedness or satisfy our short-term liquidity needs, and we may be forced to take other actions to satisfy our obligations under our indebtedness and our short-term liquidity needs, which may not be successful.

Historically, we have addressed our liquidity needs, including funds required to make scheduled principal and interest payments, refinance debt, and fund working capital and planned capital expenditures, with operating cash flow, borrowings under credit facilities and receivables and inventory financing facilities, proceeds of debt and equity offerings and proceeds from asset sales.

As of December 31, 2016, we had U.S.\$535 million funded under our securitization programs in Mexico, the United States, France and the United Kingdom. We cannot assure you that, going forward, we will be able to, if needed, roll over or renew these programs, which could adversely affect our liquidity.

The weakness of the global economic environment and its adverse effects on our operating results may negatively affect our credit rating and the market value of CEMEX, S.A.B. de C.V.'s common stock, CPOs and ADSs. If current economic pressures continue or worsen, we may be dependent on the issuance of equity as a source to repay our existing indebtedness. Although we have been able to raise debt, equity and equity-linked capital in the recent past, previous conditions in the capital markets in 2008 and 2009 were such that traditional sources of capital were not available to us on reasonable terms or at all. As a result, we cannot assure you that we will be able to successfully raise additional debt or equity capital on terms that are favorable to us or at all.

The Credit Agreement restricts us from incurring additional debt, subject to several exceptions. The Credit Agreement requires proceeds from asset disposals, issuances of equity and incurrences of debt to be applied to the prepayment of indebtedness under the Credit Agreement, unless the proceeds are used to reinvest in our business and/or refinance existing indebtedness for proceeds from asset disposals and issuances of equity, and for cash replenishment or to refinance existing indebtedness for the prepayment of the indebtedness on the terms set forth in the Credit Agreement.

We have sought and obtained waivers and amendments to several of our debt instruments relating to a number of financial ratios in the past. Our ability to comply with these ratios may be affected by current global economic conditions and volatility in foreign exchange rates and the financial and capital markets. We may need to seek waivers or amendments in the future. However, we cannot assure you that any future waivers or amendments, if requested, will be obtained. If we are unable to comply with the provisions of our debt instruments, and are unable to obtain a waiver or amendment, the indebtedness outstanding under such debt instruments could be accelerated. Acceleration of these debt instruments would have a material adverse effect on our business and financial condition.

If the global economic environment deteriorates and our operating results worsen significantly, if we were unable to complete debt or equity offerings or if our planned divestitures and/or our cash flow or capital

resources prove inadequate, we could face liquidity problems and may not be able to comply with our upcoming principal payments under our indebtedness or refinance our indebtedness.

The indentures governing the Senior Secured Notes and the terms of our other indebtedness impose significant operating and financial restrictions, which may prevent us from capitalizing on business opportunities and may impede our ability to refinance our debt and the debt of our subsidiaries.

As of March 31, 2017, there were U.S.\$6,126 million and €1,750 million aggregate principal amount of Senior Secured Notes outstanding under the indentures governing such notes. The indentures governing the Senior Secured Notes and the other instruments governing our consolidated indebtedness impose significant operating and financial restrictions on us. These restrictions will limit our ability, among other things, to:
(i) incur debt; (ii) pay dividends on stock; (iii) redeem stock or redeem subordinated debt; (iv) make investments; (v) sell assets, including capital stock of subsidiaries; (vi) guarantee indebtedness; (vii) enter into agreements that restrict dividends or other distributions from restricted subsidiaries; (viii) enter into transactions with affiliates; (ix) create or assume liens; (x) engage in mergers or consolidations; and (xi) enter into a sale of all or substantially all of our assets.

These restrictions could limit our ability to seize attractive growth opportunities for our businesses that are currently unforeseeable, particularly if we are unable to incur financing or make investments to take advantage of these opportunities.

These restrictions may significantly impede our ability to develop and implement refinancing plans in respect of our debt.

Most of the covenants are subject to a number of important exceptions and qualifications. The breach of any of these covenants could result in a default under the indentures governing the Senior Secured Notes, as well as certain other existing debt obligations, as a result of the cross-default provisions contained in the instruments governing such debt obligations. In the event of a default under any of the indentures governing the Senior Secured Notes, holders of the Senior Secured Notes could seek to declare all amounts outstanding under such Senior Secured Notes, together with accrued and unpaid interest, if any, to be immediately due and payable. If the indebtedness under the Senior Secured Notes, or certain other existing debt obligations were to be accelerated, we cannot assure you that our assets would be sufficient to repay in full such accelerated indebtedness or our other indebtedness.

Furthermore, upon the occurrence of any event of default under the Credit Agreement, the indentures governing our Senior Secured Notes or other credit facilities or any of our other debt, the lenders could elect to declare all amounts outstanding thereunder, together with accrued interest, to be immediately due and payable. If the lenders accelerate payment of those amounts, we cannot assure you that our assets would be sufficient to repay in full those amounts or to satisfy our other liabilities.

In addition, in connection with the entry into new financings or amendments to existing financing arrangements, our financial and operational flexibility may be further reduced as a result of more restrictive covenants, requirements for security and other terms that are often imposed on sub-investment grade entities.

### CEMEX, S.A.B. de C.V.'s ability to repay debt and pay dividends depends on our subsidiaries' ability to transfer income and dividends to us.

Aside from operating certain assets in Mexico, CEMEX, S.A.B. de C.V. is a holding company that owns the stock of its direct and indirect subsidiaries and has holdings of cash and marketable securities. In general, CEMEX, S.A.B. de C.V.'s ability to repay debt and pay dividends depends on the continued transfer to it of dividends and other income and funds from its wholly-owned and non-wholly-owned subsidiaries. Even though our debt agreements and instruments restrict us from entering into any agreement or arrangement that limits the

ability of any subsidiary of CEMEX, S.A.B. de C.V. to declare or pay dividends or repay or capitalize intercompany indebtedness, the ability of CEMEX, S.A.B. de C.V.'s subsidiaries to pay dividends and make other transfers to it is limited by various regulatory, contractual and legal constraints. The Credit Agreement restricts CEMEX, S.A.B. de C.V.'s ability to declare or pay cash dividends. In addition, the indentures governing the Senior Secured Notes also limit CEMEX, S.A.B. de C.V.'s ability to pay dividends.

The ability of CEMEX, S.A.B. de C.V.'s subsidiaries to pay dividends, and make loans and other transfers to it is generally subject to various regulatory, legal and economic limitations. Depending on the jurisdiction of organization of the relevant subsidiary, such limitations may include solvency and legal reserve requirements, dividend payment restrictions based on interim financial results or minimum net worth and withholding taxes on loan interest payments. For example, our subsidiaries in Mexico are subject to Mexican legal requirements, which provide that a corporation may declare and pay dividends only out of the profits reflected in the year-end financial statements that are or have been approved by its stockholders. In addition, such payment can be approved by a subsidiary's stockholders only after the creation of a required legal reserve (equal to one fifth of the relevant company's capital) and compensation or absorption of losses, if any, incurred by such subsidiary in previous fiscal years.

CEMEX, S.A.B. de C.V. may also be subject to exchange controls on remittances by its subsidiaries from time to time in a number of jurisdictions. In addition, CEMEX, S.A.B. de C.V.'s ability to receive funds from these subsidiaries may be restricted by covenants in the debt instruments and other contractual obligations of those entities.

CEMEX, S.A.B. de C.V. currently does not expect that existing regulatory, legal and economic restrictions on its subsidiaries' ability to pay dividends and make loans and other transfers to it will negatively affect its ability to meet its cash obligations. However, the jurisdictions of organization of CEMEX, S.A.B. de C.V.'s subsidiaries may impose additional and more restrictive regulatory, legal and/or economic limitations. In addition, CEMEX, S.A.B. de C.V.'s subsidiaries may not be able to generate sufficient income to pay dividends or make loans or other transfers to it in the future. Any material additional future limitations on our subsidiaries could adversely affect CEMEX, S.A.B. de C.V.'s ability to service our debt and meet its other cash obligations.

#### We are subject to restrictions due to non-controlling interests in our consolidated subsidiaries.

We conduct our business through subsidiaries. In some cases, third-party shareholders hold non-controlling interests in these subsidiaries, such as in the case of CEMEX Latam, CHP and TCL. Various disadvantages may result from the participation of non-controlling shareholders whose interests may not always be aligned with ours. Some of these disadvantages may, among other things, result in our inability to implement organizational efficiencies and transfer cash and assets from one subsidiary to another in order to allocate assets most effectively.

We have to service our debt and other financial obligations denominated in Dollars with revenues generated in Mexican Pesos or other currencies, as we do not generate sufficient revenue in Dollars from our operations to service all our debt and other financial obligations denominated in Dollars. This could adversely affect our ability to service our obligations in the event of a devaluation or depreciation in the value of the Mexican Peso, or any of the other currencies of the countries in which we operate, compared to the U.S. Dollar. In addition, our consolidated reported results and outstanding indebtedness are significantly affected by fluctuations in exchange rates between the Mexican Peso and other currencies.

A substantial portion of our total debt plus other financial obligations is denominated in Dollars. As of March 31, 2017, our debt plus other financial obligations denominated in Dollars represented approximately 74% of our total debt plus other financial obligations, which does not include U.S.\$371 million of Dollar-denominated Perpetual Debentures. Our Dollar-denominated debt must be serviced with funds generated by CEMEX, S.A.B. de C.V.'s subsidiaries. Although we have substantial operations in the U.S., we continue to rely on our non-U.S.

assets to generate revenues to service our Dollar-denominated debt. Consequently, we have to use revenues generated in Mexican Pesos, Euros or other currencies to service our Dollar-denominated obligations. See "Item 5—Operating and Financial Review and Prospects—Quantitative and Qualitative Market Disclosure—Interest Rate Risk, Foreign Currency Risk and Equity Risk—Foreign Currency Risk." A devaluation or depreciation in the value of the Mexican Peso, Euro, British Pound, Colombian Peso or any of the other currencies of the countries in which we operate, compared to the U.S. Dollar, could adversely affect our ability to service our Dollar-denominated debt. In 2016, our operations in Mexico, the United Kingdom, Germany, France, Spain, the Rest of Europe, Colombia, Egypt, the Philippines, the Rest of Asia, Middle East and Africa (as described in "Item 4—Information on the Company—Business Overview"), which are our main non-Dollar-denominated operations, together generated approximately 60% of our total net sales in Mexican Peso terms (approximately 20%, 8%, 4%, 5%, 2%, 4%, 5%, 3%, 4%, and 5%, respectively) before eliminations resulting from consolidation. In 2016, approximately 26% of our net sales in Mexican Peso terms were generated in the United States. During 2016, the Mexican Peso depreciated approximately 20% against the U.S. Dollar, the Euro depreciated approximately 3% against the U.S. Dollar and the British Pound depreciated approximately 20% against the U.S. Dollar. If we enter into currency hedges in the future, these may not be effective in covering all our currency-related risks. Our consolidated reported results for any period and our outstanding indebtedness as of any date are significantly affected by fluctuations in exchange rates between the Mexican Peso and other currencies, as those fluctuations influence the amount of our indebtedness when translated into Mexican Pesos and also result in foreign exchange gains and losses as well as gains and losses on derivative contracts, including those entered into to hedge our exchange rate exposure. The Credit Agreement and other debt instruments significantly restrict our ability to enter into derivative transactions. For a description of these restrictions, see "Item 3—Key Information—Risk Factors—Risks Relating To Our Business—Our use of derivative financial instruments has negatively affected, and any new derivative financial instruments could negatively affect, our operations, especially in volatile and uncertain markets."

In addition, as of March 31, 2017, our Euro-denominated total debt plus other financial obligations represented approximately 22% of our total debt plus other financial obligations, which does not include the €64 million aggregate principal amount of Euro-denominated Perpetual Debentures.

### Our use of derivative financial instruments has negatively affected, and any new derivative financial instruments could negatively affect, our operations, especially in volatile and uncertain markets.

We have used, and may continue to use, derivative financial instruments to manage the risk profile associated with interest rates and currency exposure of our debt, to reduce our financing costs, to access alternative sources of financing and to hedge some of our financial risks. However, we cannot assure you that our use of such instruments will allow us to achieve these objectives due to the inherent risks in any derivatives transaction. The Credit Agreement and other debt instruments significantly restrict our ability to enter into derivative transactions.

As of December 31, 2016, our derivative financial instruments consisted of equity derivatives on shares of CEMEX, S.A.B. de C.V. (including the capped call transactions in connection with the March 2018 Optional Convertible Subordinated U.S. Dollar Notes), forward contracts, interest rate derivatives related to energy projects and fuel price hedging, which had an impact on our other financial income, net. The fair value changes of our derivative financial instruments are reflected in our statement of operations, which could introduce volatility in our controlling interest net income and our related ratios. For the years ended December 31, 2015 and 2016, the recognition of changes in the fair value of derivative financial instruments during the applicable period represented net losses of approximately Ps2,981 million (U.S.\$173 million) and approximately Ps317 million (U.S.\$17 million), respectively.

CEMEX has significantly decreased its use of derivatives instruments related to debt, both currency and interest rate derivatives, thereby reducing the risk of cash margin calls. See notes 2F, 16D and 16E to our 2016 audited consolidated financial statements included elsewhere in this annual report. However, with respect to our

existing financial derivatives, we may incur net losses and be subject to margin calls that do not require a substantial amount of cash to cover such margin calls. If we enter into new derivative financial instruments, we may incur net losses and be subject to margin calls in which the cash required to cover margin calls may be substantial and may reduce the funds available to us for our operations or other capital needs. In addition, as with any derivative position, CEMEX assumes the creditworthiness risk of the counterparty, including the risk that the counterparty may not honor its obligations to us.

We are subject to the laws and regulations of the countries where we operate and any material changes in such laws and regulations and/or any significant delays in our assessing the impact and/or adapting to such changes may have an adverse effect on our business, financial condition and results of operations.

Our operations are subject to the laws and regulations of the countries where we operate and such laws and regulations, and/or governmental interpretations of such laws and regulations, may change. Any such change may have a material adverse effect on our business, financial condition and results of operations. Furthermore, changes in laws and regulations and/or governmental interpretations of such laws and regulations in the countries where we operate may require us to devote a significant amount of time and resources to assess and, if required, to adjust our operations to any such changes, which could have a material adverse effect on our business, financial condition and results of operations. In addition, any significant delays in assessing the impact and/or, if required, in adapting to changes in laws and regulations and/or governmental interpretations of such laws and regulations may also have a material adverse effect on our business, financial condition and results of operations.

### We may fail to obtain or renew or may experience material delays in obtaining requisite governmental approvals, licenses and permits for the conduct of our business.

We require various approvals, licenses, permits and certificates in the conduct of our business. We cannot assure you that we will not encounter significant problems in obtaining new or renewing existing approvals, licenses, permits and certificates required in the conduct of our business, or that we will continue to satisfy the conditions to which such approvals, licenses, permits and certificates are granted. There may also be delays on the part of regulatory and administrative bodies in reviewing our applications and granting approvals. If previously obtained approvals, licenses, permits and certificates are revoked and/or if we fail to obtain and/or maintain the necessary approvals, licenses, permits and certificates required for the conduct of our business, we may be required to incur substantial costs or temporarily suspend the operation of one or more of our production facilities or mineral extraction locations, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

#### We may fail to secure certain materials required to run our business.

We increasingly use in our business certain by-products of industrial processes produced by third parties, such as pet coke, fly-ash, slag and synthetic gypsum. While we are not dependent on our suppliers and while we try to secure the supply of the required materials through long-term renewable contracts and framework agreements, which ensure better management of supplies, short-term contracts are however entered into in certain countries where we operate. Should existing suppliers cease operations or reduce or eliminate production of these by-products, sourcing costs for these materials could increase significantly or require us to find alternative sources for these materials, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Additionally, scarcity of natural resources (such as water and aggregates reserves) in some of the countries where we operate could have a material adverse effect on our costs and results of operations.

### We may not be able to realize the expected benefits from acquisitions, some of which may have a material impact on our business, financial condition and results of operations.

Even though we have not made any major acquisitions in recent years, our ability to realize the expected benefits from acquisitions depends, in large part, on our ability to integrate acquired operations with our existing

operations in a timely and effective manner. These efforts may not be successful. Although we are currently seeking to dispose assets to reduce our overall leverage, the Credit Agreement and other debt instruments restrict our ability to acquire assets, and we may in the future acquire new operations and integrate such operations into our existing operations, and some of such acquisitions may have a material impact on our business, financial condition and results of operations. We cannot assure you that we will be successful in identifying or acquiring suitable assets in the future. If we fail to achieve the anticipated cost savings from any acquisitions, our business, financial condition and results of operations could be materially and adversely affected.

#### High energy and fuel costs may have a material adverse effect on our operating results.

Our operations consume significant amounts of power and fuel. Power and fuel prices generally reflect certain volatility, particularly in times of political turbulence in Iran, Iraq, Egypt and other countries in South America, the Middle East and Africa. Even though energy and fuel prices have recently decreased, we cannot assure you that our operations would not be materially adversely affected in the future if energy and fuel costs increase to levels that existed prior to the recent significant decreases in the price of oil and other fuels.

In addition, if our efforts to increase our use of alternative fuels are unsuccessful, we would be required to use traditional fuels, which may increase our energy and fuel costs and could have a material adverse effect on our business, financial condition and results of operations.

The introduction of substitutes for cement, concrete or aggregates into the market and the development of new construction techniques could have a material adverse effect on our business, financial condition and results of operations.

Materials such as plastic, aluminum, ceramics, glass, wood and steel can be used in construction as a substitute for cement, concrete or aggregates. In addition, other construction techniques, such as the use of dry wall, could decrease the demand for cement, concrete and/or aggregates. Further, research aimed at developing new construction techniques and modern materials may introduce new products in the future that reduce the demand for cement, concrete and/or aggregates. The use of substitutes for cement, concrete or aggregates could cause a significant reduction in the demand and prices for our products.

### We operate in highly competitive markets and if we do not compete effectively, our results of operations will be harmed.

The markets in which we operate are highly competitive and are served by a variety of established companies with recognized brand names, as well as new market entrants and increasing imports. Companies in these markets compete based on a variety of factors, often employing aggressive pricing strategies to gain market share. Our ability to increase our net sales depends, in part, on our ability to compete effectively. We compete with different types of companies and based on different factors in each market. For example, in the relatively consolidated cement and ready-mix concrete industries, we generally compete based on quality and value proposition. In the more fragmented market for aggregates, we generally compete based on capacity and price. In certain areas of the markets in which we compete, some of our competitors may be more established, benefit from greater brand recognition or have greater manufacturing and distribution channels and other resources than we do. In addition, if our competitors were to combine, they may be able to compete more effectively with us and they may dispose of assets, which could lead to new market entrants that increase competition in our markets. For example, Lafarge, S.A. ("Lafarge") and Holcim Ltd. ("Holcim") finalized their merger in 2015, and Ireland's CRH plc ("CRH") acquired the vast majority of the assets disposed by Lafarge and Holcim pursuant to the requirements of regulators. Another example is HeidelbergCement AG's ("Heidelberg") acquisition of Italcementi S.p.A. ("Italcementi"), which was completed in July 2016.

If we are not able to compete effectively, we may lose substantial market share, our net sales could decline or grow at a slower rate and our business and results of operations would be harmed.

A substantial amount of our total assets consists of intangible assets, including goodwill. We have recognized charges for goodwill impairment in the past, and if market or industry conditions deteriorate further, additional impairment charges may be recognized.

Our 2016 audited consolidated financial statements included elsewhere in this annual report, have been prepared in accordance with IFRS as issued by the IASB, under which goodwill is not amortized and is tested for impairment when impairment indicators exist or at least once a year during the fourth quarter of each year, by determining the recoverable amount of the groups of cash-generating units to which goodwill balances have been allocated, which consists of the higher of such groups of cash-generating units fair value, less cost to sell, and their corresponding value in use, represented by the discounted amount of estimated future cash flows expected to be generated by such groups of cash-generating units to which goodwill has been allocated. An impairment loss is recognized under IFRS if the recoverable amount is lower than the net book value of the groups of cashgenerating units to which goodwill has been allocated within other expenses, net. We determine the discounted amount of estimated future cash flows over periods of five years. In specific circumstances, when, according to our experience, actual results for a given cash-generating unit do not fairly reflect historical performance and most external economic variables provide us with confidence that a reasonably determinable improvement in the mid-term is expected in their operating results, management uses cash flow projections over a period of up to ten years, to the point in which future expected average performance resembles the historical average performance and to the extent we have detailed, explicit and reliable financial forecasts and is confident and can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period. If the value in use of a group of cash-generating units to which goodwill has been allocated is lower than its corresponding carrying amount, we determine its corresponding fair value using methodologies generally accepted in the markets to determine the value of entities, such as multiples of Operating EBITDA and/or by reference to other market transactions, among others. Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of our products, trends in operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets, as well as the discount rates and the growth rates in perpetuity applied, among others. We use specific pre-tax discount rates for each group of cash-generating units to which goodwill is allocated, which are applied to pre-tax cash flows. The amounts of estimated undiscounted cash flows are significantly sensitive to the growth rates in perpetuity applied. Likewise, the amounts of discounted future cash flows are significantly sensitive to the weight average cost of capital (discount rate) applied. The higher the growth rate in perpetuity applied, the higher the amount of undiscounted future cash flows by group of cash-generating units obtained. Conversely, the higher the discount rate applied, the lower the amount of discounted estimated future cash flows by group of cash-generating units obtained. During the last quarters of each of 2014, 2015 and 2016, we performed our annual goodwill impairment test. Based on these analyses, we did not determine impairment losses of goodwill in any of the reported periods. See note 15C to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Considering the important role that economic factors play in testing goodwill for impairment, we cannot assure that an eventual downturn in the economies where we operate will not necessitate further impairment tests and a possible downward readjustment of our goodwill for impairment under IFRS. Such an impairment test could result in impairment charges which could be material to our financial statements.

### We are subject to litigation proceedings, including antitrust proceedings, that could harm our business if an unfavorable ruling were to occur.

From time to time, we are and may become involved in litigation and other legal proceedings relating to claims arising from our operations in the normal course of business. As described in, but not limited to, "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings," we are currently subject to a number of significant legal proceedings, including, but not limited to, those relating to an SEC investigation concerning a new cement plant being built by CEMEX Colombia, S.A. ("CEMEX Colombia") in the Antioquia department of the Municipality of Maceo, Colombia, as well as antitrust investigations in countries in which we operate. In addition, our main operating subsidiary in Egypt, Assiut Cement Company ("ACC"), is involved in

certain Egyptian legal proceedings relating to the acquisition of ACC. Litigation is subject to inherent uncertainties, and unfavorable rulings may occur. We cannot assure you that these or other legal proceedings will not materially affect our ability to conduct our business in the manner that we expect or otherwise adversely affect us should an unfavorable ruling occur.

We have concluded that our internal control over financial reporting was not effective as of December 31, 2016, and our remediation efforts are ongoing. As a result, our ability to report our results of operations accurately, including our ability to make required filings with government authorities, may be adversely affected if our remediation efforts are not adequate. In addition, the trading price of our securities may be adversely affected by a related negative market reaction.

We have identified a material weakness in our internal control over financial reporting. Our management, including CEMEX, S.A.B. de C.V.'s Chief Executive Officer and Executive Vice President of Finance and Chief Financial Officer, has concluded that our disclosure controls and procedures were not effective as of December 31, 2016 to achieve their intended objectives. We have identified the following material weakness in our internal control over financial reporting: our risk assessment process did not operate effectively to implement controls that would prevent, or detect and correct, misstatements resulting from apparent collusion or management override of controls in relation to significant unusual transactions. In addition, we did not design and operate effective monitoring controls to detect non-compliance with our policies related to the financial reporting of significant unusual transactions. This material weakness relates, in part, to the previously disclosed irregular payments to a non-governmental individual made in connection with the construction by CEMEX Colombia of a new integrated cement plant in the Antioquia department near the municipality of Maceo, Colombia (the "Maceo Project"). As of December 31, 2016, the investigations of this failure, and the implementation of our remediation plan to address it, were not far enough advanced to provide a sufficient level of assurance that such circumvention or override of controls and misuse of funds by management would be prevented. For more information, see "Item 15—Controls and Procedures." As of the date of this annual report, the process of designing, implementing and validating remedial measures related to the material weakness is ongoing. If our efforts to remediate this material weakness are not successful, we may be unable to report our results of operations accurately and make our required filings with government authorities, including the SEC. Furthermore, our business and operating results and the price of our securities may be adversely affected by related negative market reactions. We cannot be certain that in the future additional material weaknesses will not exist or otherwise be discovered.

#### Our operations are subject to environmental laws and regulations.

Our operations are subject to a broad range of environmental laws and regulations in each of the jurisdictions in which we operate. These laws and regulations impose stringent environmental protection standards regarding, among other things, air emissions, wastewater discharges, the use and handling of hazardous waste or materials, waste disposal practices and the remediation of environmental damage or contamination. These laws and regulations expose us to the risk of substantial environmental costs and liabilities, including fines and other sanctions, the payment of compensation to third parties, remediation costs and damage to reputation. Moreover, the enactment of stricter laws and regulations, stricter interpretation of existing laws or regulations, or new enforcement initiatives, may impose new risks or costs on us or result in the need for additional investments in pollution control equipment, which could result in a material decline in our profitability.

In late 2010, the U.S. Environmental Protection Agency ("EPA") issued the final Portland Cement National Emission Standard ("Portland Cement NESHAP") for Hazardous Air Pollutants under the federal Clean Air Act ("CAA"). This rule required Portland cement plants to limit mercury emissions, total hydrocarbons, hydrochloric acid and particulate matter by September 2013. The rule was challenged in federal court, and in December 2011, the D.C. Circuit Court of Appeals remanded the Portland Cement NESHAP to EPA and directed the agency to recompute the standards. In February 2013, EPA issued a revised final Portland Cement NESHAP rule that relaxed emissions limits for particulate matter and moved the compliance deadline to September 2015. In April

2013, environmental groups again challenged the revised Portland Cement NESHAP rule in federal court. In April 2014, the D.C. Circuit issued a ruling upholding both the revised particulate matter emission limits and the September 2015 compliance deadline. Prior to the September 2015 compliance deadline, we requested and received an additional 12 months to demonstrate compliance. Portland Cement NESHAP compliance-related work continues in 2017 in several of our plants, for which we have received extensions to the compliance deadline. Compliance could require us to utilize significant resources, which could have a material adverse impact on our results of operations, liquidity and financial condition; however, we expect that such impact would be consistent with the impact on the cement industry as a whole.

In February 2013, EPA issued revised final emissions standards under the CAA for commercial and industrial solid waste incinerators ("CISWI"). Under the CISWI rule, if a material being used in a cement kiln as an alternative fuel is classified as a solid waste, the plant must comply with CISWI standards. The CISWI rule covers nine pollutants, and imposes more stringent emissions limits on certain pollutants that also are regulated under the Portland Cement NESHAP. The CISWI rule was challenged by both industrial and environmental groups in federal court. In July 2016, the D.C. Circuit issued a ruling upholding portions of the rule and remanding other portions to EPA for further consideration. In December 2016, the D.C. Circuit rejected the motions for reconsideration. If the CISWI rule takes effect in its current form, and if kilns at CEMEX plants are determined to be CISWI kilns due to the use of certain alternative fuels, the emissions standards imposed by the CISWI rule could have a material impact on our business operations.

Under certain environmental laws and regulations, liability associated with investigation or remediation of hazardous substances can arise at a broad range of properties, including properties currently or formerly owned or operated by CEMEX, as well as facilities to which we sent hazardous substances or wastes for treatment, storage or disposal. Such laws and regulations may apply without regard to causation or knowledge of contamination. We occasionally evaluate various alternatives with respect to our facilities, including possible dispositions or closures. Investigations undertaken in connection with these activities (or ongoing operational or construction activities) may lead to hazardous substance releases or discoveries of historical contamination that must be remediated, and closures of facilities may trigger compliance requirements that are not applicable to operating facilities. While compliance with these laws and regulations has not materially adversely affected our operations in the past, we cannot assure you that these requirements will not change and that compliance will not adversely affect our operations in the future. Furthermore, we cannot assure you that existing or future circumstances or developments with respect to contamination will not require us to make significant remediation or restoration expenditures.

The cement manufacturing process requires the combustion of large amounts of fuel and creates carbon dioxide ("CO2") as a by-product of the calcination process. Therefore, efforts to address climate change through federal, state, regional, EU and international laws and regulations requiring reductions in emissions of greenhouse gases ("GHGs") can create economic risks and uncertainties for our business. Such risks could include the cost of purchasing allowances or credits to meet GHG emission caps, the cost of installing equipment to reduce emissions to comply with GHG limits or required technological standards, decreased profits or losses arising from decreased demand for our goods and higher production costs resulting directly or indirectly from the imposition of legislative or regulatory controls. To the extent that financial markets view climate change and GHG emissions as a financial risk, this could have a material adverse effect on our cost of and access to capital. Given the uncertain nature of the actual or potential statutory and regulatory requirements for GHG emissions at the federal, state, regional, EU and international levels, we cannot predict the impact on our operations or financial condition or make a reasonable estimate of the potential costs to us that may result from such requirements. However, the impact of any such requirements, whether individually or cumulatively, could have a material economic impact on our operations in the United States and in other countries. For more information on the laws and regulations addressing climate change that we are, or could become, subject to, and the impacts to our operations arising therefrom, see "Item 4-Information on the Company-Regulatory Matters and Legal Proceedings—Environmental Matters."

Cement production raises a number of health and safety issues. As is the case with other companies in our industry, some of our aggregate products contain varying amounts of crystalline silica, a common mineral. Also, some of our construction and material processing operations release, as dust, crystalline silica that is in the materials being handled. Excessive, prolonged inhalation of very small-sized particles of crystalline silica has allegedly been associated with respiratory disease (including silicosis). As part of our annual due diligence, we work with our stakeholders to verify that certain health and safety protocols are in place as regards the management of silica and its health effects. Nonetheless, under various laws we may be subject to future claims related to exposure to these or other substances.

Other health and safety issues related to our business include: burns arising from contact with hot cement kiln dust or dust on preheater systems; air borne hazards related to our aggregates mining activities; noise, including from chutes and hoppers, milling plants, exhaust fans and blowers; the potential for dioxin formation if chlorine-containing alternative fuels are introduced into kilns; plant cleaning and maintenance activities involving working at height or in confined or other awkward locations, and the storage and handling of coal, pet coke and certain alternative fuels, which, in their finely ground state, can pose a risk of fire or explosion; and health hazards associated with operating ready-mix concrete trucks. While we actively seek to minimize the risk posed by these issues, personal injury claims may be made, and substantial damages awarded, against us. We may also be required to change our operational practices, involving material capital expenditure.

As part of our insurance-risk governance approach, from time to time we evaluate the need to address the financial consequences of environmental laws and regulations through the purchase of insurance. As a result we do arrange certain types of environmental impairment insurance policies for both site-specific, as well as multisite locations. We also organize non-specific environmental impairment insurance as part of the provision of a broader corporate insurance strategy. These latter insurance policies are designed to offer some assistance to our financial flexibility to the extent that the specifics of an environmental incident could give rise to a financial liability. However, we cannot assure you that a given environmental incident will be covered by the environmental insurance we have in place, or that the amount of such insurance will be sufficient to offset the liability arising from the incident.

### We are an international company and are exposed to risks in the countries in which we have significant operations or interests.

We are dependent, in large part, on the economies of the countries in which we market our products. The economies of these countries are in different stages of socioeconomic development. Consequently, like many other companies with significant international operations, we are exposed to risks from changes in foreign currency exchange rates, interest rates, inflation, governmental spending, social instability and other political, economic or social developments that may materially affect our business, financial condition and results of operations.

As of December 31, 2016, we had operations in Mexico, the United States, the United Kingdom, France, Germany, Spain, the Rest of Europe, Colombia, the Rest of SAC, the Philippines, Egypt, and the Rest of Asia, Middle East and Africa (as described in "Item 4—Information on the Company—Business Overview").

For a geographic breakdown of our net sales for the year ended December 31, 2016, see "Item 4— Information on the Company—Geographic Breakdown of Net Sales for the Year Ended December 31, 2016."

Our operations in Egypt, the United Arab Emirates ("UAE") and Israel have experienced instability as a result of, among other things, civil unrest, extremism and the deterioration of general diplomatic relations in the

region. We cannot assure you that political turbulence in Egypt, Syria, Libya and other countries in Africa and the Middle East will abate in the near future or that neighboring countries will not be drawn into conflicts or experience instability. In addition, our operations in Egypt are subject to political risks, such as confiscation, expropriation and/or nationalization. See "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings—Other Legal Proceedings—Egypt Share Purchase Agreement."

In January 2011, protests and demonstrations demanding a regime change began taking place across Egypt, which resulted in former President Hosni Mubarak resigning from his post on February 11, 2011. Subsequently, Mr. Mubarak transferred government powers to the Egyptian Army. The Supreme Council of the Armed Forces of Egypt dissolved the Egyptian parliament, suspended the nation's constitution, and formed a committee to recommend constitutional changes to facilitate a political transition through democratic elections. Following some delays, elections for a new parliament took place between November 2011 and January 2012. Elections held in May and June of 2012 witnessed the victory of Mohamed Morsi as the fifth president of Egypt. Despite a return to civilian rule, demonstrations and protests continued to take place across Egypt following Mr. Morsi's election, culminating in large-scale anti-Morsi protests in June 2013. On July 3, 2013, the Egyptian military, led by General Abdel Fattah el-Sisi removed Mr. Morsi from office and suspended the Egyptian constitution. The Egyptian military then appointed Chief Justice Adly Mansour as the interim president of Egypt, and charged him with forming a transitional technocratic government. In May 2014, presidential elections took place, having elected General Abdel Fattah el-Sisi. In November and December 2015, parliamentary elections to the House of Representatives took place. Although CEMEX's operations in Egypt have not been immune from disruptions resulting from the turbulence in Egypt, CEMEX continues with its cement production, dispatch and sales activities as of the date of this annual report. Risks to CEMEX's operations in Egypt include a potential reduction in overall economic activity in Egypt and exchange rate volatility, which could have a material adverse effect on our operations in Egypt.

In recent years, concerns over global economic conditions, energy costs, geopolitical issues, political uncertainty, the availability and cost of credit and the international financial markets have contributed to economic uncertainty and reduced expectations for the global economy. In addition, military activities in Ukraine and on its borders, including Russia effectively taking control of Crimea (followed by Crimea's independence vote and absorption by Russia) have combined with Ukraine's very weak economic conditions to create great uncertainty in Ukraine and the global markets. In response to the annexation of the Crimean region of Ukraine by Russia, other nations, including the U.S., have imposed, and may continue imposing further, economic sanctions on Russia and Ukraine. Presently, concerns related to ongoing unrest in Ukraine have prompted calls for increasing levels of economic sanctions against Russia and Ukraine. Resolution of Ukraine's political and economic conditions may not occur for some time, and the situation could deteriorate into increased violence and/or economic collapse. While not directly impacting territories where we had operations as of December 31, 2016, this dispute could negatively affect the economies of the countries in which we operate, including through its impact on the surrounding region, the global economy and the impact it might have on the access to Russian energy supplies by the countries in which we operate. Further, potential responses by Russia to those sanctions could adversely affect European economic conditions, which could have a material adverse effect on our operations in Europe. Meanwhile, the continued political unrest in Venezuela, the continued hostilities in the Middle East and the occurrence or threat of terrorist attacks also could adversely affect the global economy.

There is considerable political instability in Taiwan related to its disputes with China and in South Korea related to its disputes with North Korea. In addition, several Asian countries, particularly Japan, have experienced significant economic instability. A major outbreak of hostilities or other political upheaval in China, Taiwan, North Korea or South Korea could adversely affect the global economy, which could have a material adverse effect on our business, financial condition or result of operation.

There have been terrorist attacks and ongoing threats of future terrorist attacks in countries in which we maintain operations. We cannot assure you that there will not be other attacks or threats that will lead to an economic contraction or erection of material barriers to trade in any of our markets. An economic contraction in any of our major markets could affect domestic demand for cement and could have a material adverse effect on our operations.

#### Our operations can be affected by adverse weather conditions.

Construction activity, and thus demand for our products, decreases substantially during periods of cold weather, when it snows or when heavy or sustained rainfalls occur. Consequently, demand for our products is significantly lower during the winter in temperate countries and during the rainy season in tropical countries. Winter weather in our European and North American operations significantly reduces our first quarter sales volumes, and to a lesser extent our fourth quarter sales volumes. Sales volumes in these and similar markets generally increase during the second and third quarters because of normally better weather conditions. However, high levels of rainfall can adversely affect our operations during these periods as well, such as has been the case in early 2017 for our operations in the Philippines. Such adverse weather conditions can adversely affect our business, financial condition and results of operations if they occur with unusual intensity, during abnormal periods, or last longer than usual in our major markets, especially during peak construction periods.

#### We will be adversely affected by any significant or prolonged disruption to our production facilities.

Any prolonged and/or significant disruption to our production facilities, whether due to repair, maintenance or servicing, industrial accidents, unavailability of raw materials such as energy, mechanical equipment failure, human error or otherwise, will disrupt and adversely affect our operations. Additionally, any major or sustained disruptions in the supply of utilities such as water or electricity or any fire, flood or other natural calamities or communal unrest or acts of terrorism may disrupt our operations or damage our production facilities or inventories and could adversely affect our business, financial condition and results of operations.

We typically shut down our facilities to undertake maintenance and repair work at scheduled intervals. Although we schedule shut downs such that not all of our facilities are shut down at the same time, the unexpected shut down of any facility may nevertheless affect our business, financial condition and results of operations from one period to another.

### We are dependent on information technology and our systems and infrastructure, as well as those provided by third-party service providers; face certain risks, including cyber security risks.

We rely on a variety of information technology and automated operating systems to manage or support our operations. The proper functioning of these systems is critical to the efficient operation and management of our business. In addition, these systems may require modifications or upgrades as of a result of technological changes or growth in our business. These changes may be costly and disruptive to our operations, and could impose substantial demands on outage time. Our systems, as well as those provided by our third-party service providers, may be vulnerable to damage, disruption or intrusion caused by circumstances beyond our control, such as physical or electronic break-ins, catastrophic events, power outages, natural disasters, computer system or network failures, viruses or malware, unauthorized access and cyber-attacks. Although we take actions to secure our systems and electronic information and also have disaster recovery plans in case of incidents that could cause major disruptions to our business, these measures may not be sufficient. As of December 31, 2016, our thirdparty service providers have not informed us of any relevant event that has materially damaged, disrupted or resulted in an intrusion of our systems. Any significant information leakages or theft of information could affect our compliance with data privacy laws and damage our relationship with our employees, customers and suppliers, and also adversely impact our business, financial condition and results of operations. As of December 31, 2016, our insurance does not cover any risk associated with any cyber security risks. In addition, any significant disruption to our systems could adversely affect our business, financial condition and results of operations.

### Activities in our business can be hazardous and can cause injury to people or damage to property in certain circumstances.

Our production facilities require individuals to work with chemicals, equipment and other materials that have the potential to cause harm and injury, or fatalities, when used without due care. An accident or injury that

occurs at our facilities could result in disruptions to our business and have legal and regulatory consequences and we may be required to compensate such individuals or incur other costs and liabilities, any and all of which could adversely affect our reputation, business, financial condition, results of operations and prospects.

### Labor activism and unrest, or failure to maintain satisfactory labor relations, could adversely affect our results of operations.

Labor activism and unrest may adversely affect our operations and thereby adversely affect our business, financial condition, results of operations and prospects. Although most of our operations have not been affected by any significant labor dispute in the past, we cannot assure you that we will not experience labor unrest, activism, disputes or actions in the future, some of which may be significant and could adversely affect our business, financial condition, results of operations and prospects. For a description of our most relevant collective bargaining agreements, see "Item 6—Directors, Senior Management and Employees—Employees."

### Increases in liabilities related to our pension plans could adversely affect our results of operations.

We have obligations under defined benefit pension and other benefit plans in certain countries in which we operate, mainly in North America and Europe. Our actual funding obligations will depend on benefit plan changes, government regulations and other factors, including changes in longevity and mortality statistics, which are not updated every year and could result in our paying benefits over more years due to increased lifespan. Due to the large number of variables and assumptions that determine pension liabilities and funding requirements, which are difficult to predict because they change continuously as demographics evolve despite the fact that we support our projections with studies by external actuaries, our net projected liability recognized in the balance sheet of Ps23,365 million (U.S.\$1,128 million) as of December 31, 2016 and the future cash funding requirements for our defined benefit pension plans and other postemployment benefit plans could be significantly higher than the amounts estimated as of December 31, 2016. If so, these funding requirements, as well as our possible inability to properly fund such pension plans if we are unable to deliver the cash or equivalent funding requirements, could have a material adverse effect on our business, financial condition, results of operations and prospects.

### Our insurance coverage may not cover all the risks to which we may be exposed.

We face the risks of loss and damage to our products, property and machinery due to fire, theft and natural disasters such as floods, and also face risks related to cyber security risks. Such events may cause a disruption to or cessation of our operations. While we believe that we have adequate and sufficient coverage, in line with industry practices, in some instances our insurance coverage may not be sufficient to cover all of our potential unforeseen losses and liabilities. In addition, our insurance coverage may not cover all the risks to which we may be exposed, such as cyber security risks. If our losses exceed our insurance coverage, or if we are not covered by the insurance policies we have taken up, we may be liable to cover any shortfall or losses. Our insurance premiums may also increase substantially because of such claims. In such circumstances, our financial results may be adversely affected.

### Our success depends on key members of our management.

Our success depends largely on the efforts and strategic vision of our executive management team. The loss of the services of some or all of our executive management could have a material adverse effect on our business, financial condition and results of operations.

The execution of our business plan also depends on our ongoing ability to attract and retain additional qualified employees. For a variety of reasons, particularly with respect to the competitive environment and the availability of skilled labor, we may not be successful in attracting and retaining the personnel we require. If we are unable to hire, train and retain qualified employees at a reasonable cost, we may be unable to successfully operate our business or capitalize on growth opportunities and, as a result, our business, financial condition and results of operations could be adversely affected.

### Certain tax matters may have an adverse effect on our cash flow, financial condition and net income.

We are subject to certain tax matters, mainly in Mexico, Colombia and Spain, that, if adversely resolved, may have an adverse effect on our cash flow, financial condition and net income. See notes 2M, 19C and 19D to our 2016 audited consolidated financial statements, "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings—Tax Matters—Mexico," "—Regulatory Matters and Legal Proceedings—Tax Matters—Colombia," and "—Regulatory Matters and Legal Proceedings—Tax Matters—Spain" for a description of the legal proceedings regarding these Mexican, Colombian and Spanish tax matters, all included elsewhere in this annual report.

### It may be difficult to enforce civil liabilities against us or the members of CEMEX, S.A.B. de C.V.'s Board of Directors, our executive officers and controlling persons.

CEMEX, S.A.B. de C.V. is a publicly traded stock corporation with variable capital (sociedad anónima bursátil de capital variable) organized under the laws of Mexico. Substantially all members of CEMEX, S.A.B. de C.V.'s Board of Directors and the majority of the members of our senior management reside in Mexico, and all or a significant portion of the assets of those persons may be, and the majority of our assets are, located outside the United States. As a result, it may not be possible for you to effect service of process within the United States upon such persons or to enforce against them or against us in U.S. courts judgments predicated upon the civil liability provisions of the federal securities laws of the United States. We have been advised by our General Counsel, Ramiro Gerardo Villarreal Morales, that there is doubt as to the enforceability in Mexico, either in original actions or in actions for enforcement of judgments of U.S. courts, of civil liabilities predicated on the U.S. federal securities laws.

### The protections afforded to non-controlling shareholders in Mexico are different from those in the United States and may be more difficult to enforce.

Under Mexican law, the protections afforded to non-controlling shareholders are different from those in the United States. In particular, the legal framework and case law pertaining to disputes between shareholders and us, our directors, our officers or our controlling shareholders, if any, are less developed under Mexican law than under U.S. law. Mexican law generally only permits shareholder derivative suits (i.e., suits for our benefit as opposed to the direct benefit of our shareholders) and there are different procedural requirements for bringing shareholder lawsuits, such as shareholder derivative suits, which differ from those you may be familiar with under U.S. and other laws. There is also a substantially less active plaintiffs' bar dedicated to the enforcement of shareholders' rights in Mexico than in the United States. As a result, in practice it may be more difficult for our non-controlling shareholders to enforce their rights against us or our directors or controlling shareholders than it would be for shareholders of a U.S. company.

## ADS holders may only vote the Series B shares represented by the CPOs deposited with the ADS depositary through the ADS depositary and are not entitled to vote the Series A shares represented by the CPOs deposited with the ADS depositary or to attend shareholders' meetings.

Under the terms of the ADSs and CEMEX, S.A.B. de C.V.'s by-laws, a holder of an ADS has the right to instruct the ADS depositary to exercise voting rights only with respect to Series B shares represented by the CPOs deposited with the depositary, but not with respect to the Series A shares represented by the CPOs deposited with the depositary. ADS holders will not be able to directly exercise their right to vote unless they withdraw the CPOs underlying their ADSs (and, in the case of non-Mexican holders, even if they do so, they may not vote the Series A shares represented by the CPOs) and may not receive voting materials on time to ensure that they are able to instruct the depositary to vote the CPOs underlying their ADSs or receive sufficient notice of a shareholders' meeting to permit them to withdraw their CPOs to allow them to cast their vote with respect to any specific matter. In addition, the depositary and its agents may not be able to send out voting instructions on time or carry them out in the manner an ADS holder has instructed. As a result, ADS holders may

not be able to exercise their right to vote and they may lack recourse if the CPOs underlying their ADSs are not voted as they requested. In addition, ADS holders are not entitled to attend shareholders' meetings. ADS holders will also not be permitted to vote the CPOs underlying the ADSs directly at a shareholders' meeting or to appoint a proxy to do so without withdrawing the CPOs. If the ADS depositary does not receive voting instructions from a holder of ADSs in a timely manner such holder will nevertheless be treated as having instructed the ADS depositary to give a proxy to a person we designate, or at our request, the corresponding CPO trust's technical committee designates, to vote the Series B shares underlying the CPOs represented by the ADSs in his/her discretion. The ADS depositary or the custodian for the CPOs on deposit may represent the CPOs at any meeting of holders of CPOs even if no voting instructions have been received. The CPO trustee may represent the Series B shares and the Series B shares represented by the CPOs at any meeting of holders of Series A shares or Series B shares even if no voting instructions have been received. By so attending, the ADS depositary, the custodian or the CPO trustee, as applicable, may contribute to the establishment of a quorum at a meeting of holders of CPOs, Series A shares or Series B shares, as appropriate.

### Non-Mexicans may not hold CEMEX, S.A.B. de C.V.'s Series A shares directly and must have them held in a trust at all times.

Non-Mexican investors in CEMEX, S.A.B. de C.V.'s CPOs or ADSs may not directly hold the underlying Series A shares, but may hold them indirectly through CEMEX, S.A.B. de C.V.'s CPO trust. Upon the early termination or expiration of the term of CEMEX, S.A.B. de C.V.'s CPO trust on September 6, 2029, the Series A shares underlying CEMEX, S.A.B. de C.V.'s CPOs held by non-Mexican investors must be placed into a new trust similar to the current CPO trust for non-Mexican investors to continue to hold an economic interest in such shares. We cannot assure you that a new trust similar to the CPO trust will be created or that the relevant authorization for the creation of the new trust or the transfer of our Series A shares to such new trust will be obtained. In that event, since non-Mexican holders currently cannot hold Series A shares directly, they may be required to sell all of their Series A shares to a Mexican individual or corporation.

#### Preemptive rights may be unavailable to ADS holders.

ADS holders may be unable to exercise preemptive rights granted to CEMEX, S.A.B. de C.V.'s shareholders, in which case ADS holders could be substantially diluted following future equity or equity-linked offerings. Under Mexican law, whenever CEMEX, S.A.B. de C.V. issues new shares for payment in cash or in kind, CEMEX, S.A.B. de C.V. is generally required to grant preemptive rights to CEMEX, S.A.B. de C.V.'s shareholders, except if the shares are issued in respect of a public offering or if the relevant shares underlie convertible securities. However, ADS holders may not be able to exercise these preemptive rights to acquire new shares unless both the rights and the new shares are registered in the United States or an exemption from registration is available. We cannot assure you that we would file a registration statement in the United States at the time of any rights offering.

### **Mexican Peso Exchange Rates**

Mexico has had no exchange control system in place since the dual exchange control system was abolished in November 1991. The Mexican Peso has floated freely in foreign exchange markets since December 1994, when the Mexican Central Bank (Banco de México) abandoned its prior policy of having an official devaluation band. Since then, the Mexican Peso has been subject to substantial fluctuations in value. The Mexican Peso appreciated against the U.S. Dollar by approximately 9% in 2012, depreciated against the U.S. Dollar by approximately 2% in 2013, 11% in 2014, 14% in 2015 and 20% in 2016. These percentages are based on the exchange rate that we use for accounting purposes (the "CEMEX accounting rate"). The CEMEX accounting rate on any given date is determined based on the closing exchange rate reported by certain sources, such as Reuters. For any given date, the CEMEX accounting rate may differ from the noon buying rate for Mexican Pesos in New York City published by the U.S. Federal Reserve Bank of New York.

The following table sets forth, for the periods and dates indicated, the end-of-period, average and high and low points of the CEMEX accounting rate as well as the noon buying rate for Mexican Pesos, expressed in Mexican Pesos per U.S.\$1.00.

	<b>CEMEX Accounting Rate</b>			<b>Noon Buying Rate</b>				
Year Ended December 31,	End of the period	Average(1)	High	Low	End of the period	Average(1)	High	Low
2012	12.85	13.16	14.37	12.56	12.96	13.15	14.37	12.63
2013	13.05	12.85	13.39	11.98	13.10	12.76	13.43	11.98
2014	14.74	13.37	14.78	12.84	14.75	13.31	14.79	12.85
2015	17.23	15.98	17.23	14.95	17.20	15.87	17.36	14.56
2016	20.72	18.72	20.72	17.18	20.62	18.66	20.84	17.19
Monthly (2016)								
September	19.39				19.34		19.86	18.84
October	18.86				18.79		19.34	18.49
November	20.57				20.46		20.84	18.44
December	20.72				20.62		20.74	20.22
<b>Monthly (2017)</b>								
January	20.83				20.84		21.89	20.62
February	20.10				20.00		20.82	19.74
March	18.73				18.72		19.93	18.67
April(2)	18.73				18.84		18.87	18.48

<sup>(1)</sup> The average of the CEMEX accounting rate or the noon buying rate for Mexican Pesos, as applicable, on the last day of each full month during the relevant period.

Between January 1, 2017 and April 21, 2017, the Mexican Peso appreciated by approximately 9% against the U.S. Dollar, based on the noon buying rate for Mexican Pesos.

For a discussion of the financial treatment of our operations conducted in other currencies, see "Item 3—Key Information—Selected Consolidated Financial Information" included elsewhere in this annual report.

#### **Selected Consolidated Financial Information**

The financial data set forth below as of and for each of the five years ended December 31, 2016, have been derived from our 2016 audited consolidated financial statements. The financial data set forth below as of December 31, 2015 and 2016 and for each of the three years ended December 31, 2014, 2015 and 2016 have been derived from, and should be read in conjunction with, and are qualified in their entirety by reference to, our 2016 audited consolidated financial statements included elsewhere in this annual report. Our 2016 audited consolidated financial statements prepared under IFRS for the year ended December 31, 2016, were approved by our shareholders at the annual general ordinary shareholders' meeting held on March 31, 2017. See "Item 5— Operating and Financial Review and Prospects—Recent Developments—Recent Developments Relating to Our Shareholders."

The operating results of newly acquired businesses are consolidated in our financial statements beginning on the acquisition date. Therefore, all periods presented do not include operating results corresponding to newly acquired businesses before we assumed control. As a result, the financial data for the years ended December 31, 2014, 2015, and 2016 may not be comparable to that of prior periods.

Our 2016 audited consolidated financial statements included elsewhere in this annual report, have been prepared in accordance with IFRS, which differ in significant respects from U.S. GAAP. The regulations of the

<sup>(2)</sup> April noon buying rates and CEMEX accounting rates are through April 21, 2017.

SEC do not require foreign private issuers that prepare their financial statements on the basis of IFRS (as published by the IASB) to reconcile such financial statements to U.S. GAAP.

Non-Mexican Peso amounts included in the consolidated financial statements are first translated into Dollar amounts, in each case at a commercially available or an official government exchange rate for the relevant period or date, as applicable, and those Dollar amounts are then translated into Mexican Peso amounts at the CEMEX accounting rate, described under "— Mexican Peso Exchange Rates," as of the relevant period or date, as applicable.

The Dollar amounts provided below, unless otherwise indicated elsewhere in this annual report, are translations of Mexican Peso amounts at an exchange rate of Ps20.72 to U.S.\$1.00, the CEMEX accounting rate as of December 31, 2016. However, in the case of transactions conducted in Dollars, we have presented the U.S. Dollar amount of the transaction and the corresponding Mexican Peso amount that is presented in our consolidated financial statements. These translations have been prepared solely for the convenience of the reader and should not be construed as representations that the Mexican Peso amounts actually represent those Dollar amounts or could be converted into Dollars at the rate indicated. The noon buying rate for Mexican Pesos on December 31, 2016 was Ps20.62 to U.S.\$1.00. Between January 1, 2017 and April 21, 2017, the Mexican Peso appreciated by approximately 9% against the U.S. Dollar, based on the noon buying rate for Mexican Pesos.

# CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Selected Consolidated Financial Information

As of and For the Year Ended December 31,

	As of and For the Year Ended December 31,						
	2012	2013	2014	2015	2016		
	(in million		Pesos, except share amoun	except ratios and share and mounts)			
Statement of Operations Information:		-					
Net sales	Ps 197,036	Ps 190,370	Ps 199,942	Ps 220,326	Ps 250,909		
Cost of sales(1)	(138,706)	(130,686)	(134,742)	(146,068)	(161,883)		
Gross profit	58,330	59,684	65,200	74,258	89,026		
Operating expenses	(41,329)	(40,404)	(43,347)	(47,769)	(53,762)		
Operating earnings before other expenses, net(2)	17,001	19,280	21,853	26,489	35,264		
Other expense, net		(4,863)	(5,045)	(3,043)	(1,646)		
Operating earnings(2)		14,417	16,808	23,446	33,618		
Financial items(3)	(17,534)	(18,195)	(18,952)	(21,002)	(17,027)		
Share of profit of equity accounted investees		232	294	738	688		
Earnings (loss) before income tax		(3,546)	(1,850)	3.182	17,279		
Discontinued operations(4)(5)		97	90	1,279	1,024		
Non-controlling interest net income		1,223	1,103	932	1,174		
Controlling interest net income (loss)		(10,834)	(6,783)	1,201	14,033		
Basic earnings (loss) per share(6)(7)	(0.33)	(0.28)	(0.16)	0.03	0.33		
Diluted earnings (loss) per share(6)(7)			(0.16)	0.03	0.33		
Basic earnings (loss) per share of continuing	(0.55)	(0.20)	(0.10)	0.03	0.55		
operations(6)(7)	(0.33)	(0.29)	(0.16)		0.31		
Diluted earnings (loss) per share of continuing	(0.33)	(0.29)	(0.10)		0.51		
- · · · · · · · · · · · · · · · · · · ·	(0.22)	(0.20)	(0.16)		0.31		
operations(6)(7)		, ,	(0.16)	40 402			
Number of shares outstanding(6)(8)(9)	32,808	34,270	37,370	40,403	42,182		
	12 479	15 176	12.500	15 200	11 555		
Cash and cash equivalents		15,176	12,589	15,280	11,555		
Assets from discontinued operations held for sale(4)(5)		205.717	202.020	3,446	13,590		
Property, machinery and equipment, net	213,075	205,717	202,928	214,133	227,111		
Total assets	478,797	496,130	514,961	542,264	599,728		
Short-term debt including current maturities of long-term	50.6	2.050	1 4 505	210	1.016		
debt		3,959	14,507	218	1,216		
Long-term debt		187,021	191,327	229,125	235,016		
Liabilities from operations held for sale				673	1,466		
Non-controlling interest and Perpetual Debentures(10)		14,939	17,068	20,289	28,951		
Total controlling interest	141,139	133,379	131,103	143,479	167,774		
Other Financial Information:							
Net working capital(11)		20,754	20,757	16,781	7,908		
Book value per share(6)(9)(12)		3.89	3.51	3.55	3.98		
Operating margin before other expense, net	8.6%	6 10.19	6 10.9%	12.0%	14.1%		
Operating EBITDA(13)	34,506	33,447	35,556	41,354	51,411		
Ratio of Operating EBITDA to interest expense(13)	1.9	1.7	1.7	2.1	2.4		
Capital expenditures	10,465	8,409	9,486	12,313	13,279		
Depreciation and amortization	17,505	14,167	13,703	14,865	16,147		
Net cash flow provided by continued operating activities before interest, coupons on Perpetual Debentures and							
income taxes	30,222	26,400	35,445	43,184	61,188		
operations(6)(7)	(0.99)	(0.87)	(0.48)		0.93		
Basic earnings (loss) per CPO(6)(7)	, ,	(0.87) $(0.84)$	(0.48)	0.09	0.93		
Total debt plus other financial obligations		230,298	244,429	268,198	273,862		
Total debt plus offici imancial obligations	210,020	430,470	477,747	200,170	213,002		

<sup>(1)</sup> Cost of sales includes depreciation, amortization and depletion of assets involved in production, freight expenses of raw materials used in our producing plants, delivery expenses of our ready-mix concrete business and expenses related to storage in producing plants. Our cost of sales excludes (i) expenses related to personnel and equipment comprising our selling network and those expenses related to warehousing at the points of sale, which are included as part of the line item titled "Administrative and selling expenses," and (ii) freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers' locations, which are all included as part of the line item titled "Distribution expenses."

- (2) In the statements of operations, CEMEX includes the line item titled "Operating earnings before other expenses, net" considering that is a relevant measure for CEMEX's management as explained in note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report. Under IFRS, while there are line items that are customarily included in the statement of operations, such as net sales, operating costs and expenses and financial revenues and expenses, among others, the inclusion of certain subtotals such as "Operating earnings before other expenses, net" and the display of such statements of operations varies significantly by industry and company according to specific needs.
- (3) Financial items include financial expenses and our other financial (expense) income, net, which includes our financial income, results from financial instruments, net (derivatives, fixed-income investments and other securities), foreign exchange results and effects of net present value on assets and liabilities and others, net. See notes 7 and 16 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- On October 31, 2015, after the conditions precedent were satisfied, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. Our combined operations in Austria and Hungary consisted of 29 aggregates quarries and 68 ready-mix plants. As per IFRS, our balance sheet as of December 31, 2014 was not restated as a result of the sale of our operations in Austria and Hungary. The information related to our statements of operations for the year ended December 31, 2012 has not been reclassified to present the financial results of those years of our operations in Austria, Hungary and Croatia in a single line item as "Discontinued operations." We believe that the effects are not significant. On May 26, 2016, we closed the sale of our operations in Bangladesh and Thailand to Siam City Cement Public Company Ltd. ("SIAM Cement") for approximately U.S.\$70 million. As per IFRS, our balance sheet as of December 31, 2015 was not restated as a result of the sale of our operations in Thailand and Bangladesh. On January 31, 2017, one of CEMEX, S.A.B. de C.V.'s subsidiaries in the U.S. closed the sale of our U.S. Reinforced Concrete Pipe Manufacturing Business (the "Concrete Pipe Business") to Quikrete Holdings, Inc. ("Quikrete") for U.S.\$500 million plus an additional U.S.\$40 million contingent consideration based on future performance. See "Item 4-Information on the Company-Business Overview." Considering that we disposed of our entire concrete pipe division, the operations of the Concrete Pipe Business, as included in our statements of operations for the years ended December 31, 2014, 2015 and 2016, were reclassified to the single line item "Discontinued Operations." In addition, as of December 31, 2016, the Concrete Pipe Business was reclassified to assets held for sale and directly related liabilities on our consolidated balance sheet, including U.S.\$260 million (Ps5,369 million) of goodwill associated with the reporting segment in the United States that was proportionally allocated to these net assets based on their relative fair values. The information related to our statements of operations for the years ended December 31, 2012 and 2013 has not been reclassified to present the financial results of those years of our operations in Thailand, Bangladesh and the Concrete Pipe Business in a single line item as discontinued operations. We believe that the effects are not significant. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- (5) On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- (6) CEMEX, S.A.B. de C.V.'s capital stock consists of Series A shares and Series B shares. Each CPO represents two Series A shares and one Series B share. As of December 31, 2016, approximately 99.84% of CEMEX, S.A.B. de C.V.'s outstanding share capital was represented by CPOs. Each ADS represents ten CPOs.
- (7) Earnings (loss) per share is calculated based upon the weighted average number of shares outstanding during the year, as described in note 22 to our 2016 audited consolidated financial statements included elsewhere in this annual report. Basic loss per CPO is determined by multiplying the basic loss per share for each period by three (the number of shares underlying each CPO). Basic loss per CPO is presented solely for the convenience of the reader and does not represent a measure under IFRS. As shown in notes 4A and 22 to our consolidated financial statements included elsewhere in this annual report, and in connection with the sale of our operations in Croatia, Austria, Hungary, Thailand, Bangladesh, and the sale of the Concrete Pipe Business, for the year ended December 31, 2014, "Basic loss per share" includes Ps0.16 from "Continuing operations," and for the year ended December 31, 2016, "Basic earnings per share" includes Ps0.31 from "Continuing operations." In addition, for the years ended December 31, 2015 and 2016, "Basic earnings per share" includes Ps0.03 and Ps0.02, respectively, from "Discontinued operations." Likewise, for the year ended December 31, 2014, "Diluted loss per share" includes Ps0.16, and for the year ended December 31, 2016, "Diluted earnings per share"

- includes Ps0.31 from "Continuing operations." In addition, for the years ended December 31, 2015 and 2016, "Diluted earnings per share" includes Ps0.03 and Ps0.02, respectively, from "Discontinued operations." See note 22 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- (8) CEMEX, S.A.B. de C.V. did not declare a dividend for fiscal years 2012, 2013, 2014, 2015 and 2016. At each of CEMEX, S.A.B. de C.V.'s 2012, 2013, 2014, 2015 and 2016 annual general ordinary shareholders' meetings, held on March 21, 2013, March 20, 2014, March 26, 2015, March 31, 2016, and March 30, 2017, respectively, CEMEX, S.A.B. de C.V.'s shareholders approved a recapitalization of retained earnings. New CPOs issued pursuant to each such recapitalization were allocated to shareholders on a pro-rata basis. As a result, shares equivalent to approximately 437.4 million CPOs, approximately 468 million CPOs, approximately 500 million CPOs, approximately 538 million CPOs and approximately 562.4 million CPOs were allocated to shareholders on a pro-rata basis in connection with the 2012, 2013, 2014, 2015 and 2016 recapitalizations, respectively. In each case, CPO holders received one new CPO for each 25 CPOs held and ADS holders received one new ADS for each 25 ADSs held. There was no cash distribution and no entitlement to fractional shares.
- (9) Based upon the total number of shares outstanding at the end of each period, expressed in millions of shares, and includes shares subject to financial derivative transactions, but does not include shares held by our subsidiaries.
- (10) As of December 31, 2012, 2013, 2014, 2015 and 2016 non-controlling interest includes U.S.\$473 million (Ps6,078 million), U.S.\$477 million (Ps6,223 million), U.S.\$466 million (Ps6,869 million), U.S.\$440 million (Ps7,581 million) and U.S.\$438 million (Ps9,075 million), respectively, that represents the nominal amount of Perpetual Debentures, denominated in Dollars and Euros, issued by consolidated entities. In accordance with IFRS, these securities qualify as equity due to their perpetual nature and the option to defer the coupons.
- (11) Net working capital equals trade receivables, less allowance for doubtful accounts plus inventories, net, less trade payables.
- (12) Book value per share is calculated by dividing the total controlling interest by the number of shares outstanding.
- (13) Operating EBITDA equals operating earnings before other expenses, net, plus amortization and depreciation expenses. Operating EBITDA is calculated and presented because we believe that it is widely accepted as a financial indicator of our ability to internally fund capital expenditures and service or incur debt, and the consolidated ratio of Operating EBITDA to interest expense is calculated and presented because it is used to measure our performance under certain of our financing agreements. Operating EBITDA and such ratio are non-IFRS measures, and should not be considered as indicators of our financial performance as alternatives to cash flow, as measures of liquidity or as being comparable to other similarly titled measures of other companies. Under IFRS, while there are line items that are customarily included in statements of operations prepared pursuant to IFRS, such as net sales, operating costs and expenses and financial revenues and expenses, among others, the inclusion of certain subtotals, such as operating earnings before other expenses, net, and the display of such statement of operations varies significantly by industry and company according to specific needs. Our Operating EBITDA may not be comparable to similarly titled measures reported by other companies due to potential differences in the method of calculation. Operating EBITDA is reconciled below to operating earnings before other expenses, net, as reported in the statements of operations, and to net cash flows provided by operating activities before interest and income taxes paid in cash, as reported in the statement of cash flows. Interest expense under IFRS does not include coupon payments of the Perpetual Debentures issued by consolidated entities of approximately Ps453 million in 2012, approximately Ps405 million in 2013, approximately Ps420 million in 2014, approximately Ps432 million in 2015 and approximately Ps507 million in 2016, as described in note 20D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

	For the Year Ended December 31,								
	2012	2013	2014	2015	2016				
		(in milli	ons of Mexica						
Reconciliation of Operating EBITDA to net cash flows provided by continuing operations									
activities before interest, coupons on Perpetual Debentures and income taxes									
Operating EBITDA	Ps 34,506	Ps 33,447	Ps 35,556	Ps 41,354	Ps 51,411				
Operating depreciation and amortization									
expense	17,505	14,167	13,703	14,865	16,147				
Operating earnings before other expenses, net	17,001	19,280	21,853	26,489	35,264				
Plus/minus:									
Changes in working capital excluding income taxes  Operating depreciation and amortization	(2,048)	(4,237)	1,475	3,541	11,023				
expense	17,505	14,167	13,703	14,865	16,147				
Other items, net	(2,236)	(2,810)	(1,586)	(1,711)	(1,246)				
Net cash flow provided by continuing operations activities before interest, coupons on Perpetual Debentures and income taxes	Ps 30,222	Ps 26,400	Ps 35,445	Ps 43,184	Ps 61,188				

# Item 4—Information on the Company

Unless otherwise indicated, references in this annual report to our sales and assets, including percentages, for a country or region are calculated before eliminations resulting from consolidation, and thus include intercompany balances between countries and regions. These intercompany balances are eliminated when calculated on a consolidated basis.

## **Business Overview**

CEMEX, S.A.B. de C.V. is a publicly traded stock corporation with variable capital, or *sociedad anónima bursátil de capital variable*, organized under the laws of Mexico, with its principal executive offices located at Avenida Ricardo Margáin Zozaya #325, Colonia Valle del Campestre, San Pedro Garza García, Nuevo León, 66265, Mexico. Our main phone number is +52 81 8888-8888.

CEMEX, S.A.B. de C.V. was founded in 1906 and was registered with the Mercantile Section of the Public Registry of Property and Commerce in Monterrey, Nuevo León, Mexico, on June 11, 1920 for a period of 99 years. At our 2002 ordinary general shareholders' meeting, this period was extended to the year 2100 and in 2015 this period changed to be indefinite. Beginning April 2006, CEMEX's full legal and commercial name is CEMEX, *Sociedad Anónima Bursátil de Capital Variable*.

CEMEX is one of the largest cement companies in the world, based on annual installed cement production capacity as of December 31, 2016, of approximately 92.9 million tons. After the merger of Holcim with Lafarge during 2015, which resulted in the company LafargeHolcim Ltd. ("LafargeHolcim"), we are the next largest ready-mix concrete company in the world with annual sales volumes of approximately 52.1 million cubic meters and one of the largest aggregates companies in the world with annual sales volumes of approximately 150.8 million tons, in each case, based on our annual sales volumes in 2016. We are also one of the world's largest cement companies, with annual sales volumes of approximately 66.7 million tons of cement in 2016. This information does not include discontinued operations. See note 4A to our 2016 audited consolidated financial

statements included elsewhere in this annual report. CEMEX, S.A.B. de C.V. is an operating and holding company engaged, directly or indirectly, through its operating subsidiaries, primarily in the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates, clinker and other construction materials throughout the world, and that provides reliable construction-related services to customers and communities in more than 50 countries throughout the world, and maintains business relationships in over 100 countries worldwide.

We operate globally, with operations in Mexico, the United States, Europe, South America, Central America, the Caribbean, Asia, the Middle East and Africa. We had total assets of Ps599,728 million (approximately U.S.\$28,944 million) as of December 31, 2016, and an equity market capitalization of approximately Ps233,924 million (U.S.\$12,436 million) as of April 21, 2017.

As of December 31, 2016, our cement production facilities were located in Mexico, the United States, Spain, Egypt, the Philippines, Colombia, Poland, the Dominican Republic, Germany, the United Kingdom, Croatia, Panama, Latvia, Puerto Rico, the Czech Republic, Costa Rica, and Nicaragua. As of December 31, 2016, our assets (after eliminations), cement plants and installed capacity, on an unconsolidated basis by region, were as set forth below. Installed capacity, which refers to theoretical annual production capacity, represents gray portland cement equivalent capacity, which counts each ton of white cement capacity as approximately two tons of gray portland cement capacity, and includes installed capacity of cement plants that have been temporarily closed.

	As of December 31, 2016						
	Assets After Eliminations (in Billions of Mexican Pesos)	Number of Cement Plants	Installed Cement Production Capacity (Millions of Tons Per Annum)				
<b>Mexico</b> (1)	Ps 70.5	15	30.0				
United States(2)	289.1	12	16.6				
Europe							
United Kingdom	32.6	2	2.4				
France	17.8	_	_				
Germany	8.5	1	2.4				
Spain	27.3	7	10.4				
Rest of Europe(3)	16.5	4	6.3				
South, Central America and the Caribbean							
Colombia	26.5	2	4.0				
Rest of SAC(4)	22.3	5	8.5				
Asia, Middle East and Africa							
Philippines	12.3	2	4.5				
Egypt	5.5	1	5.4				
Rest of Asia, Middle East and Africa(5)	12.3	_	_				
Corporate and Other Operations	33.3	_	_				
Continuing operations	574.5	51	90.5				
Discontinued operations(6)	25.2	3					
Total	Ps 599.7	54	92.9				

<sup>&</sup>quot;- " Not applicable

The above table includes our proportional interest in the installed capacity of companies in which we hold a non-controlling interest and reflects our organizational structure as of December 31, 2016, which effective as of January 1, 2016 was changed by (i) integrating the Northern Europe region and certain countries that comprised the Mediterranean region into a new Europe region which consists of our operations in Spain, the

- United Kingdom, France, Germany, the Czech Republic, Poland, Latvia, Croatia, Sweden, Norway, and Finland (ii) creating the new Asia, Middle East and Africa region which consists of our operations in the Philippines, Malaysia, Egypt, Israel, and the UAE.
- (1) "Number of cement plants" and "installed cement production capacity" includes two cement plants that have been temporarily closed with an aggregate annual installed capacity of 2.8 million tons of cement. "Installed cement production capacity" includes 1.0 million tons of cement representing our proportional interests through associates in three other cement plants.
- (2) "Number of cement plants" and "installed cement production capacity" includes two cement plants that have been temporarily closed with an aggregate annual installed capacity of 2.1 million tons of cement. "Installed cement production capacity" includes 1.3 million tons of cement representing our proportional interests through associates in six other cement plants. On February 10, 2017, one of our subsidiaries in the U.S. sold its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio with installed capacity of 0.8 million tons of cement.
- (3) "Rest of Europe" refers primarily to our operations in the Czech Republic, Poland, and Latvia, as well as trading activities in Scandinavia and Finland. "Installed cement production capacity" includes 0.7 million tons of cement representing our proportional interest in a Lithuanian cement producer that operated one other cement plant.
- (4) "Rest of SAC" refers primarily to our operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala, and small ready-mix concrete operations in Argentina. "Installed cement production capacity" includes 1.1 million tons of cement representing our proportional interests through associates in Barbados, Jamaica, and Trinidad and Tobago in three other cement plants.
- (5) "Rest of Asia, Middle East and Africa" includes our operations in Malaysia, the UAE, and Israel.
- (6) "Discontinued operations" include the previously contemplated sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for the years ended December 31, 2016, 2015 and 2014. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. Due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

During the majority of the last 26 years, we embarked on a major geographic expansion program to diversify our cash flows and enter markets whose economic cycles within the cement industry largely operate independently from those of Mexico and which offer long-term growth potential. We have built an extensive network of marine and land-based distribution centers and terminals that give us marketing access around the world. As part of our strategy, we also periodically review and reconfigure our operations in implementing our post-merger integration process, and we also divest assets that we believe are less important to our strategic objectives. The following are our significant acquisitions and our most significant divestitures and reconfigurations that we have announced or closed since 2013:

• On October 31, 2014, CEMEX, S.A.B. de C.V. announced that it had entered into agreements with Holcim (currently LafargeHolcim after the 2015 merger of Holcim with Lafarge) to complete a series of related transactions in Europe, which closed on January 5, 2015, with retrospective effect as of January 1, 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report. As a result, (i) CEMEX acquired all of Holcim's assets in the Czech Republic, including a cement plant, four aggregates quarries and 17 ready-mix plants for approximately €115 million (U.S.\$139 million or Ps2,049 million); (ii) CEMEX sold to Holcim assets in the western region of Germany, consisting of one cement plant, two cement grinding mills, one slag granulator, 22 aggregates quarries and 79 ready-mix plants for approximately €171 million (U.S.\$207 million or

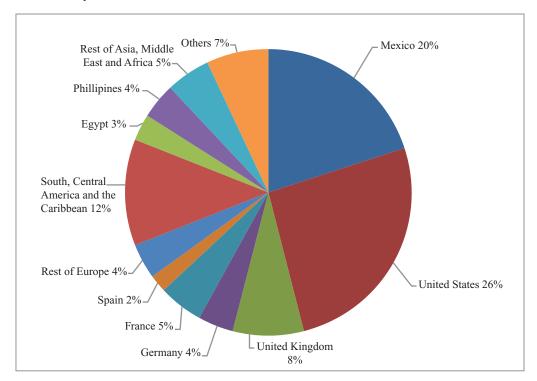
- Ps3,047 million), while CEMEX maintained its operations in the north, east and south of Germany; and (iii) CEMEX acquired from Holcim one cement plant in the southern part of Spain and one cement mill in the central part of Spain, among other related assets, for approximately €88 million (U.S.\$106 million or Ps1,562 million) and we kept our other operations in Spain. In connection with these transactions, in January 2015 CEMEX made a final payment in cash, after combined debt and working capital adjustments, of approximately €33 million (U.S.\$40 million or Ps594 million).
- On October 31, 2015, after all conditions precedent were satisfied, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. Our combined operations in Austria and Hungary consisted of 29 aggregates quarries and 68 ready-mix plants. The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014 included in our statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2015, a gain on sale of approximately U.S.\$45 million (Ps741 million). Such gain on sale includes the reclassification to the statement of operations of foreign currency translation effects accrued in equity until October 31, 2015 for an amount of approximately U.S.\$10 million (Ps215 million). See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- On May 26, 2016, CEMEX, S.A.B. de C.V. closed the sale of its operations in Bangladesh and Thailand to Siam City Cement Public Company Ltd for approximately U.S.\$70 million (Ps1,450 million). Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's Statements of Operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.
- On July 18, 2016, CHP closed its initial public offering of 45% of its common shares in the Philippines, and 100% of CHP's common shares started trading on the Philippine Stock Exchange under the ticker "CHP." As of March 31, 2017, CASE, an indirect subsidiary of CEMEX España, directly owned approximately 55% of CHP's outstanding common shares. The net proceeds to CHP from its initial public offering were approximately U.S.\$506.8 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CHP. CHP used the net proceeds from the initial public offering to repay existing indebtedness owed to BDO Unibank and to an indirect subsidiary of CEMEX.
- On September 12, 2016, one of our subsidiaries in the U.S. signed a definitive agreement for the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle Materials Inc. for U.S.\$400 million. The proceeds obtained from this transaction were used mainly for debt reduction and for general corporate purposes. This transaction closed on February 10, 2017.
- On November 18, 2016, after all conditions precedent were satisfied, CEMEX, S.A.B. de C.V. announced that it had closed the sale of certain assets in the U.S. to GCC for approximately U.S.\$306 million. The assets were sold by an affiliate of CEMEX to an affiliate of GCC in the U.S., and mainly consisted of CEMEX's cement plant in Odessa, Texas, two cement terminals and the building materials business in El Paso, Texas and Las Cruces, New Mexico.
- On December 5, 2016, Sierra presented an Offer to all shareholders of TCL, a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL, which, together with Sierra's existing share ownership in TCL of approximately 39.5%, would, if successful, result in Sierra holding up to 74.9% of the equity share capital in TCL. The total number of TCL shares tendered and accepted in response to the Offer was 113,629,723, which, together with Sierra's pre-existing shareholding in TCL (147,994,188 shares), represented approximately 69.83% of the outstanding TCL shares as of March 31, 2017. The total cash payment by Sierra for the tendered shares was approximately U.S.\$86.36 million. CEMEX started consolidating TCL for financial reporting purposes on February 1, 2017. TCL has de-listed from the Jamaica and Barbados stock exchanges.

- On January 31, 2017, one of CEMEX, S.A.B. de C.V.'s subsidiaries in the U.S. closed the sale of the Concrete Pipe Business to Quikrete for U.S.\$500 million plus an additional U.S.\$40 million purchase price contingent on future performance.
- On February 15, 2017, CEMEX, S.A.B. de C.V. sold 45,000,000 shares of common stock of GCC at a price of Ps95 per share in a public offering to investors in Mexico authorized by the CNBV and in a concurrent private placement to eligible investors outside of Mexico. Prior to the offerings, CEMEX, S.A.B. de C.V. owned a 23% direct interest in GCC and a minority interest in CAMCEM, an entity which owns a majority interest in GCC. After the offerings, CEMEX, S.A.B. de C.V. owned a 9.47% direct interest in GCC and the minority interest in CAMCEM.
- On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- On April 17, 2017, CEMEX, S.A.B. de C.V. announced that one of its subsidiaries in the U.S. had entered into a definitive agreement for the sale of its Pacific Northwest Materials Business ("Pacific Northwest") to Cadman Materials, Inc. ("Cadman Materials"), a LehighHanson company and U.S. subsidiary of HeidelbergCement Group, for U.S.\$150 million. Pacific Northwest consists of aggregates, asphalt and ready-mix concrete operations in Oregon and Washington. Pending satisfaction of certain conditions, including regulatory approvals, the proceeds obtained from this sale will be used mainly for debt reduction and general corporate purposes.

From January 1, 2016 to March 31, 2017, we sold assets for approximately U.S.\$2,063 million. As of March 31, 2017, we expect to sell additional assets for U.S.\$500 million to achieve our goal of approximately U.S.\$2.5 billion in asset sales by the end of 2017. As of the date of this annual report, in addition to certain immaterial fixed asset sales, we have sold CEMEX Concretos' ready-mix concrete pumping assets in Mexico for U.S.\$80 million and announced the sale of Pacific Northwest for U.S.\$150 million.

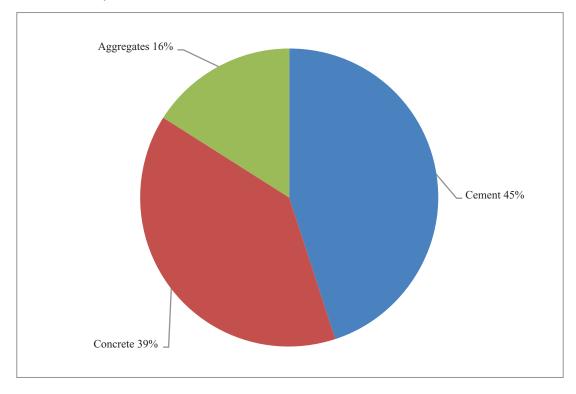
# Geographic Breakdown of Net Sales for the Year Ended December 31, 2016

The following chart indicates the geographic breakdown of our net sales, before eliminations resulting from consolidation, for the year ended December 31, 2016:



# Breakdown of Net Sales by Product for the Year Ended December 31, 2016

The following chart indicates the breakdown of our net sales by product, after eliminations resulting from consolidation, for the year ended December 31, 2016:



## **Our Products**

We always strive to provide superior building solutions in the markets we serve. To this end, we tailor our products and services to suit customers' specific needs, from home construction, improvement and renovation to agricultural, industrial and marine/hydraulic applications.

## Cement

Cement is a binding agent, which, when mixed with sand, stone or other aggregates and water, produces either ready-mix concrete or mortar. Whether in bags or in bulk, we provide our customers with high-quality branded cement products and services. We tap our professional knowledge and experience to develop customized products that fulfill our clients' specific requirements and foster sustainable construction. In many of the countries where we have cement operations, a large proportion of cement sold is a bagged, branded product. We often deliver the product to a large number of distribution outlets such that our bagged, branded cement is available to the end users in a point of sale in close proximity to where the product will be used. We strive to develop brand identity and recognition in our bagged product.

We manufacture cement through a closely controlled chemical process, which begins with the mining and crushing of limestone and clay, and, in some instances, other raw materials. The clay and limestone are then pre-homogenized, a process which consists of combining different types of clay and limestone. The mix is typically dried, then fed into a grinder which grinds the various materials in preparation for the kiln. The raw materials are calcined, or processed, at a very high temperature in a kiln, to produce clinker. Clinker is the intermediate product used in the manufacture of cement. For limestone, clay and gypsum, requirements are based on chemical composition that, depending on the other materials available, matches with the quality demanded by

the production process. For cement limestone, clay and gypsum, we run chemical tests to prepare the mining plan of the quarry, to confirm material quality and reduce variations in the mineral content. We consider that limestone and clay quality of our cement raw material quarries are adequate for the cement production process.

There are two primary processes used to manufacture cement: the dry process and the wet process. The dry process is more fuel efficient. As of December 31, 2016, 52 of our 54 operative production plants used the dry process and one used the wet process. Our operative production plant that uses the wet process is located in the United Kingdom. In the wet process, the raw materials are mixed with water to form slurry, which is fed into a kiln. Fuel costs are greater in the wet process than in the dry process because the water that is added to the raw materials to form slurry must be evaporated during the clinker manufacturing process. In the dry process, the addition of water and the formation of slurry are eliminated, and clinker is formed by calcining the dry raw materials. In the most modern application of this dry process technology, the raw materials are first blended in a homogenizing silo and processed through a pre-heater tower that utilizes exhaust heat generated by the kiln to pre-calcine the raw materials before they are calcined to produce clinker.

Clinker and gypsum are fed in pre-established proportions into a cement grinding mill where they are ground into an extremely fine powder to produce finished cement. We primarily cover our gypsum needs from third parties; however, we also operate gypsum quarries in the United States, Spain, Dominican Republic and Egypt. Our main types of cement include the following:

*Gray Ordinary Portland Cement*: Our gray ordinary portland cement is a high-quality, cost-effective building material, mainly composed of clinker, that meets applicable chemical and physical requirements and is widely used in all construction segments: residential, commercial, industrial, and public infrastructure.

White Portland Cement: CEMEX is one of the world's largest producers of white portland cement. We manufacture this type of cement with limestone, low iron content kaolin clay, and gypsum. Customers use our white portland cement in architectural works requiring great brightness and artistic finishes, to create mosaics and artificial granite, and for sculptural casts and other applications where white prevails.

*Masonry or Mortar*: Masonry or mortar is a portland cement that we mix with finely ground inert matter (limestone). Our customers use this type of cement for multiple purposes, including concrete blocks, templates, road surfaces, finishes, and brick work.

*Oil-well Cement*: Our oil-well cement is a specially designed variety of hydraulic cement produced with gray portland clinker. It usually forges slowly and is manageable at high temperatures and pressures. Produced in classes from A to H and J, our oil-well cement is applicable for different depth, chemical aggression, or pressure levels.

Blended Cement: Blended hydraulic cements are produced by inter-grinding or blending portland cement and supplementary cementitious materials such as ground granulated blast furnace slag, fly ash, silica fume, calcined clay, hydrated lime, and other pozzolans. The use of blended cements in ready-mix concrete reduces mixing water and bleeding, improves workability and finishing, inhibits sulfate attack and the alkali-aggregate reaction, and reduces the heat of hydration. CEMEX offers an array of blended cements which have a lower CO2 footprint resulting from their lower clinker content due to the addition of supplementary cementitious materials. The use of blended cements reinforces our strong dedication to sustainable practices and furthers our objective of offering an increasing range of more sustainable products.

## Ready-Mix Concrete

Ready-mix concrete is a combination of cement, fine and coarse aggregates, admixtures (which control properties of the concrete including plasticity, pumpability, freeze-thaw resistance, strength and setting time), and water. We tailor our ready-mix concrete to fit our clients' specific needs. By changing the proportion of

water, aggregates, and cement in the mix, we modify our concrete's resistance, manageability, and finish. We also use additives to customize our concrete consistent with the transportation time from our plant to the project, weather conditions at the construction site, and the project's specifications. From our water-resistant to our self-compacting concrete, we produce a great variety of specially designed concrete to meet the many challenges of modern construction.

We develop solutions based on the thorough knowledge and application of ready-mix concrete technology. Leveraging years of experience, a global pool of knowledge, and state-of-the-art expertise about the different ready-mix concrete constituents and their interaction, we offer our customers tailor-designed concrete. CEMEX ready-mix concrete technologists are able to modify the properties of concrete through the use of innovative chemical admixtures, combined with the proper proportions of the various concrete constituents. For example, depending on the type of application and jobsite requirements, we can design ready-mix concrete that is more fluid, stronger, develops strength faster, and also retains workability longer. Through the development of chemical admixtures solutions, our researchers design special concretes that fulfill the construction industry's increasingly demanding performance requirements. CEMEX offers a special ready-mix concrete portfolio, comprised of such products as ultra-rapid hardening concrete, crack-resistant/low shrinkage concrete, self-consolidating concrete, architectural concrete, pervious concrete, and a number of others.

We continuously work to improve the properties of ready-mix concrete that make it a key component of sustainable construction: durability, resistance to aggressive environments, light reflection, and capacity to store energy, among others. We also constantly work to develop innovative solutions that advance the sustainability of structures made with ready-mix concrete. This way, our customers can design sustainable buildings that can take advantage of the benefits of concrete in a wide range of applications. We offer engineered concrete for harbors and bridges with a special design of high performance concrete that combines durability and low maintenance with resistance to aggressive environments, and for industrial applications which consists of concrete with high acid resistance which is robust and durable for such uses as cooling towers; we also offer concrete for building and housing used for structures such as self-compacting concrete that improves the strength and durability of building structures, while reducing energy use and noise due to concrete vibration, and envelope concrete such as structural lightweight concrete or insulating concrete forms which offer insulation solutions to improve energy efficiency in buildings, and concrete for building design that takes advantage of concrete's capacity to store energy—its thermal mass—minimizing temperature fluctuations in a building over the course of the day, reducing the need for additional heating and cooling; we also offer ready-mix concrete for water and wastewater management and for roads and pavements.

The types of ready-mix concrete we offer our clients include, but are not limited to:

Standard Ready-Mix Concrete: Standard ready-mix concrete is the most common form of concrete. It is prepared for delivery at a concrete plant instead of mixed on the construction site.

Architectural and Decorative Concrete: This type of ready-mix concrete can provide a structural function, as well as an aesthetic or decorative finish. It can offer smooth or rough surfaces or textures, as well as a variety or range of colors.

Rapid-Setting Concrete: Designed to enhance early strength development, this type of ready-mix concrete allows fast formwork removal, accelerated construction sequencing, and rapid repair for such jobs as roads and airport runways. Typically used in low temperature (5-10°C) concreting during winter, this type of ready-mix concrete can also be used in buildings, railways, and precast applications. In addition to saving time, this type of ready-mix concrete technology offers improved durability and acid resistance.

Fiber-Reinforced Concrete: Ready-mix concrete designed with micro or macro fibers that can be used either for structural applications, where the fibers can potentially substitute for steel rebar reinforcement, or for reducing shrinkage, primarily early age shrinkage. Macro fibers can significantly increase the ductility of concrete, making it highly resistant to crack formation and propagation.

*Fluid-Fill Concrete*: Fluid mortar or ready-mix concrete simplifies the process of laying pipe and cable by surrounding the pipe or cable with a tightly packed shell that provides protection from the elements, prevents settling, and enables crews to work quickly.

*Roller-Compacted Concrete*: Compacted in place and cured, roller-compacted concrete is a zero slump ready-mix concrete with the abrasion resistance to withstand high velocity water, making it the material of choice for spillways and other infrastructure subject to high flow conditions. It represents a competitive solution in terms of cost and durability when compared to asphalt.

Self-Consolidating Concrete: Self consolidating concrete has very high flow; therefore, it is self-leveling, eliminating the need for vibration. Due to the superplasiticizers used, chemical admixtures that impart very high flow, self-consolidating concrete exhibits very high compaction as a result of its low air content. Consequently, self-consolidating concrete can have very high strengths, exceeding 50 MPa.

*Pervious Concrete*: Because of its unique design mix, pervious concrete is a highly porous material that allows water, particularly rainwater, to filter through, reduces flooding and heat concentration by up to 4°C, and helps to prevent skidding on wet roads. This ready-mix concrete is ideally used in parking lots, footpaths, and swimming pool border applications.

*Antibacterial Concrete*: This type of ready-mix concrete helps control bacteria growth and is used to help maintain clean environments in structures such as hospitals, laboratories, and farms.

## Aggregates

We are one of the world's largest suppliers of aggregates: primarily the crushed stone, sand and gravel, used in virtually all forms of construction. Our customers use our aggregates for a wide array of applications: as a key component in the construction and maintenance of highways, walkways, parking lots, airport runways, and railways; for drainage, water filtration, purification, and erosion control; as fill material; for sand traps on golf courses, beaches, playing field surfaces, horse racing tracks, and related applications; and to build bridges, homes, and schools.

Aggregates are obtained from land-based sources such as sand and gravel pits and rock quarries or by dredging marine deposits.

*Hard Rock Production.* Rock quarries usually operate for at least 30 years and are developed in distinct benches or steps. A controlled explosion is normally used to release the rock from the working face. It is then transported by truck or conveyor to a crusher to go through a series of crushing and screening stages to produce a range of final sizes to suit customers' needs. Dry stone is delivered by road, rail or water from the quarry.

Sand and Gravel Production. Sand and gravel quarries are much shallower than rock quarries and are usually worked and restored in progressive phases. Water can either be pumped out of the quarries allowing them to be worked dry or they can be operated as lakes with extraction below water. A conveyor draws the raw material into the processing plant where it is washed to remove unwanted clay and to separate sand. Sand separated during processing is dewatered and stockpiled. Gravel then passes over a series of screens that sieve the material into different sizes. Processing separates the gravel into stockpiles in a range of sizes for delivery.

Marine Aggregate Production. A significant proportion of the demand for aggregates is satisfied from rivers, lakes, and seabeds. Marine resources are increasingly important to the sustainable growth of the building materials industry. Marine aggregates also play an important role in replenishing beaches and protecting coastlines from erosion. At sea, satellite navigation is used to position a vessel precisely within its licensed dredging area. Vessels trail a pipe along the seabed and use powerful suction pumps to draw sand and gravel into the cargo hold. Dredged material is discharged at wharves, where it is processed, screened and washed for delivery.

Aggregates are an indispensable ingredient in ready-mix concrete, asphalt, and mortar. Accounting for approximately 60% to 75% of ready-mix concrete's volume, aggregates strongly influence concrete's freshly mixed and hardened properties. Aggregates not only increase concrete's strength, but also can make the mix more compact, enabling applications such as weatherproofing and heat retention. They can further contribute to concrete's aesthetic qualities. For example, sand gives surface treatments their brightness.

The types of aggregates we offer our clients include, but are not limited to:

Crushed Stone and Manufactured Sand: These products are obtained by mining rock and breaking it down to a preferred size. In the case of manufactured sand, the product is obtained by crushing rock to the selected shape or texture, ensuring product and project specifications are met. Sources of crushed stone can be igneous, sedimentary, or metamorphic.

*Gravel*: Gravel deposits are produced through a natural process of weathering and erosion. It can be used for roads, for concrete manufacturing, or for decorative purposes.

*Sand*: Sand occurs naturally and is composed of fine rock material and mineral particles. Its composition is variable depending on the source. It can be used for roads, for concrete manufacturing, or sanitation.

*Recycled Concrete*: Recycled concrete is created by breaking, removing, and crushing existing concrete to a preferred size. It is commonly used as a base layer for other construction materials because it compacts to form a firm surface.

## **Related Products**

We rely on our close relationship with our customers to offer them complementary products for their construction needs, which mainly include the following:

Asphalt: We offer a wide range of cost effective, high performance asphalt products, from our standard hot mix asphalt, which is made by combining crushed stone with liquid asphalt cement, to highly technical products that can be used on major highway systems, driveways, commercial parking lots, or rural country roads. Designed for consistency and reliability, our asphalt products are designed to withstand different weight loads, traffic volumes, and weather conditions.

Concrete Block: Standard concrete block, sometimes referred to as gray block, concrete masonry unit, or cinder block, is one of the most practical and long-lasting materials used in building. Its strength, durability, and versatility, including its energy efficiency, excellent fire and high wind resistance, and noise insulation, make concrete block a compelling alternative to many other building materials.

*Roof Tiles*: We offer a comprehensive range of concrete roof tiles and fittings, designed to meet the requirements of most roofing applications. Available in a wide selection of sizes, shapes, and colors, our roof tiles serve residential and commercial needs.

Architectural Products: Our high-end architectural concrete products offer a range of styles for different building or landscaping projects. Specialty rock products, as well as architectural block, in an array of colors, sizes, and textures, take our customers' design to a new level. Block paving solutions and decorative paving provide an ideal range of applications for any hard landscaping project.

*Pipe*: We design and manufacture standard and special concrete pipe for various applications such as storm and sanitary sewers. Offered in diverse types, sizes, and lengths, our pipe products meet or exceed applicable standards and customer requirements throughout our different operations.

Other Precast Products: Among our other precast products, we offer rail products, concrete floors, box culverts, bridges, drainage basins, barriers, and parking curbs. In selected markets, we further complement our commercial offer with admixtures, gypsum, and cementitious materials such as fly ash and blast furnace slag.

## **Building Solutions**

We help build the homes people live in, the roads that connect them, and the infrastructure that makes their cities vibrant. With over a century of experience delivering tailor-made building solutions, we work with our customers around the world to build sustainable structures that will thrive today and well into the future.

*Housing*: We integrate our cutting-edge design, building materials, and construction systems into flexible and replicable housing solutions for our clients and communities across the globe.

*Paving*: As the world's leader in concrete-based pavement solutions, we help connect cities and their surrounding communities through safer, more durable, and energy-efficient highways, mass transit systems, airport runways, rural roadways, and city streets.

*Green Building Consultancy*: We are focused on delivering sustainable building solutions to the increasingly complex needs of a society with limited natural resources.

## **Services**

We continuously communicate and interact with our customers to identify and implement effective ways to meet their toughest challenges. We recognize that customer loyalty happens by design, not by chance. To better serve our customers, we not only need to have a clear understanding of what they need, but also the means and passion to fulfill those needs. The following are examples of the different services offered to our customers throughout our operations, all of which services are provided in all our operations and may vary from location to location:

24/7 LOAD®: Our delivery service offers customers the ease of receiving products whenever they need them, allowing our customers to optimize their project schedules according to their specific needs.

ATM-like Bulk Cement Dispatch System: This service offers our customers greater flexibility and efficiency. It enables them to get cement at their convenience, shortening their logistics schedules by minimizing loading and unloading times and also cutting back on more traditional transactional practices.

Construrama®: We partner with our cement distribution network to offer customers an extensive range of brand-name products at competitive prices. Our retailers also receive integral training to better manage all aspects of their business, including inventory management, product promotion, salesforce programs, product-delivery and sourcing logistics.

Customer-oriented Educational and Training Services: In several of the countries where we operate, customers can receive training on specific topics related to the use of building materials. By sharing knowledge and best practices, our educational and training services guide and teach our customers. Topics range from teaching customers about the characteristics and uses of white cement, to showing retailers how to improve their inventory management and increase their sales.

Construction Financing Services: Our customers can receive financing on certain projects and product purchases through various innovative financing programs that vary from country to country. For example, since 1998, our United Nations award-winning low-income housing program, *Patrimonio Hoy*, has assisted more than 570,000 families with affordable services and building materials through financing mechanisms and technical assistance. Additionally, in certain countries where we operate, such as Mexico, we offer turn-key solutions for developers and partner with governments and local authorities to identify, coordinate, and develop public infrastructure projects.

*Mobile Solutions*: Through automated messages sent via short message services (SMS), our customers can be notified each time an order of cement or ready-mix concrete is ready for delivery. This free-of-charge service keeps our customers well informed of their specific project logistics. Our customers can also receive information about their pending invoice payments.

*Multiproducts*: We offer our customers a one-stop shopping experience by providing them with a full array of complementary construction-related supplies through our retail stores from plumbing and electrical supplies to paint, lumber, and lighting fixtures.

Online Services: Our customers have all day online access to information, from account balances to new products and services releases through online services such as CEMEX Connect, CEMEX One, eSelling, CEMEXNet, Commercial Portal. Our customers can place online cement orders, and in some countries, they are able to review their order status at any time during the day or night. The online service is also an open communication channel to receive feedback from our customers.

*Service Centers*: We offer a one-stop contact call center where customers can manage their business and find fast, reliable service, place orders, make inquiries, review order status, or request technical assistance, all in one single call.

Smart Silo®: We work together with our customers, so they always have the appropriate quantity of cement in their silos. Through 24-hour monitoring of our customers' silos' cement stock levels, our SmartSilo® technology allows us to anticipate and respond to their product replenishment needs ahead of time.

*Technical Support*: We strive to provide our customers with top-level technical assistance through our state-of-the-art equipment and our highly professional, well-trained technical services staff. We go the extra mile and provide value above and beyond fulfilling our customers' need for cement, aggregates, ready-mix concrete, and related products such as mortar.

## Description of our Raw Materials Reserves

We are a leading global provider of building materials, including cement, ready-mix concrete and aggregates. Our cement production process begins with the mining and crushing of limestone and clay, and, in some instances, other raw materials. We have access to limestone and clay quarries near most of our cement plant sites worldwide since these minerals are the main raw materials in the cement production process.

In addition, we are one of the world's largest suppliers of aggregates, primarily hard rock, sand and gravel, obtained from quarries, to be used in ready-mix concrete and other concrete-based products such as blocks and pipes.

Customers use our aggregates for a wide array of purposes, from a key component in the construction and maintenance of highways, walkways, and railways to an indispensable ingredient in concrete, asphalt and mortar. Aggregates can be used in their natural state or crushed into smaller size pieces.

The types of mine mostly used to extract raw materials for aggregates and cement production, are open pit or open cut, which relate to deposits of economically useful minerals or rocks that are found near the land surface. Open-pit mines that produce raw material for our industry are commonly referred to as quarries. Open-pit mines are typically enlarged until either the mineral resource is exhausted, or an increasing ratio of overburden to exploitable material makes further mining uneconomic. In some cases, we also extract raw materials by dredging underwater deposits.

Aggregates and other raw materials for our own production processes are obtained mainly from our own sources. However, we may cover our aggregates and other raw material needs through the supply from third-parties. For the year ended December 31, 2016, approximately 15% of our total raw material needs were supplied by third-parties.

Reserves are considered as proven when all legal and environmental conditions have been met and permits have been granted. Proven reserves are those for which (i) the quantity is computed from dimensions revealed by drill data, together with other direct and measurable observations such as outcrops, trenches and quarry faces and (ii) the grade and/or quality are computed from the results of detailed sampling; and the sampling and measurement data are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established. Probable reserves are those for which quantity and grade and/or quality are computed from information similar to that used from proven reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Our reserve estimates are prepared by CEMEX's engineers and geologists and are subject to annual review by our corporate staff jointly with the regional technical managers associated to our business units. On specific circumstances we have used the services of third-party geologists and/or engineers to validate our own estimates. Over the three-year period ended December 31, 2016, we have employed third-parties to review (i) our cement raw materials reserves estimates in Mexico, Colombia, Nicaragua, Costa Rica, the United Kingdom, Germany, Latvia and Spain, and (ii) our aggregates reserves estimates in France, Poland, the Czech Republic, the United Kingdom, Germany and Mexico.

Reserves determination incorporates only materials meeting specific quality requirements. For aggregates used in ready-mix concrete such requirements are based on hardness, shape and size; for cement raw materials (mainly limestone and clay), such requirements are based on a chemical composition that matches the quality demanded by the production process. In the case of cement raw materials, since chemical composition varies from production sites and even in the same site, we conduct geostatistical chemical tests and determine the best blending proportions to meet production quality criteria and to try to maintain an extraction ratio close to 100% of the reported reserves for such materials.

The main equipment utilized in our production sites is as follows:

- In our cement facilities: drills, crushers, kilns, coolers, mills, packing/loading machines, pay loaders, excavators, off-road trucks and other material handling equipment.
- In our ready-mix concrete facilities: batch plants, silos and mobile equipment and mixer trucks.
- In our aggregates facilities: drills, crushers, screens, belt conveyors, pay loaders, excavators, trucks and other material handling equipment.

We believe that our facilities are in general good condition, adequate for efficient operations.

During 2016, our total quarry material production was approximately 195 million tons, of which approximately 63% was used for our own consumption to produce cement, ready-mix concrete, and/or other products which are later sold to the public and the remaining 37% was directly sold to customers.

Our estimates distinguish between owned and leased reserves, the later determined over the term of the lease contract, and include only those permitted reserves which are proven and probable. As of December 31, 2016, the total surface of property in our quarries operations (including cement raw materials quarries and aggregates quarries), was approximately 101,868 hectares, of which approximately 77% was owned by us and approximately 23% was managed through lease contracts.

As of December 31, 2016, we operated 171 cement raw materials quarries across our global operations, serving our facilities dedicated to cement production, which are located at or near the cement plant facilities. We estimate that our proven and probable cement raw material reserves, on a consolidated basis, have an average remaining life of approximately 82 years, assuming 2012-2016 average annual cement production (last five years average production).

The table set forth below presents our total permitted proven and probable cement raw materials reserves by geographic segment and material type extracted or produced in our cement raw materials quarries operations.

		Number of	Suri	Property Surface (hectares) Reserves (Million tons)		Voors to	2016 Annualized	5 years aver.	Own		
Location	Mineral		Owned	Leased	Proven	Probable	Total	depletion	Production	Production	Use
Mexico(1)	Limestone	18	8,966	48	1172	1666	2838	138	20.9	20.5	92%
	Clay	15	8,371	_	164	148	312	88	3.7	3.5	100%
	Others	15	1,729	150	8	22	30	95	0.3	0.3	100%
United States(2)	Limestone	13	21,834	_	558	149	707	51	15.0	13.9	100%
	Clay	2	_	_	22		22	_	0.3	_	0%
Europe	-										
United Kingdom	Limestone	3	681	107	128	43	171	79	2.5	2.2	100%
-	Clay	2	98	_	14	18	32	53	0.7	0.6	100%
	Others	_	_	_			_			_	%
Germany	Limestone	1	298	_	8	101	109	38	2.7	2.9	87%
France	Limestone	2	192	23	24		24	13	1.6	1.8	100%
Spain	Limestone	12	726	117	303	131	434	82	5.3	5.3	81%
•	Clay	6	64	72	19	_	19	23	_	0.8	97%
	Others	2	102	9	1	14	15	_	_	_	%
Rest of Europe	Limestone	4	843	27	255	45	300	60	5	5	96%
1	Clay	1	70	_	10	2	12	48	0.2	0.3	100%
	Others	1	4	5			_	60	_	_	100%
SAC											
Colombia	Limestone	13	3026	1751	17	209	226	54	4.2	4.2	91%
	Clay	3	183	250		12	12	43	0.1	0.3	100%
	Others	1	86	52		1	1	4	0.3	0.3	100%
Rest of SAC	Limestone	19	906	221	381	469	850	136	5.1	6.3	99%
	Clay	8	540	60	46	36	83	124	0.5	0.7	100%
	Others	6	27	1566	16	50	66	62	0.3	1.1	69%
Asia, Middle East											
and Africa											
Philippines(3)	Limestone	5	224	_	180	35	215	41	6.2	5.3	100%
11 ( )	Clay	3	37	_		3	3	14	0.1	0.2	100%
	Others	5	76	9	5	4	9	12	0.5	0.7	100%
Egypt	Limestone	2	_	146	291	_	291	52	5.3	5.6	100%
	Clay	4	_	402	77	_	77	53	1.3	1.4	100%
	Others	5	_	21.999	2	_	2	17	_	0.1	100%
CEMEX											
Consolidated	Limestone	92	37,695	2,441	3,316	2,849	6,165	85	73.8	72.84	93%
	Clay	44	9,362	784	351	220	571	73	6.9	7.80	96%
	Others	35	2,023	1,813	33	92	125	49	1.5	2.56	93%
	Totals	<del>171</del>	49,081	5,037	3,701	3,160	6,860	82	82.2	83.2	

<sup>(1)</sup> Our cement raw materials operations in Mexico include three limestone quarries that also produce hard rock aggregates.

<sup>(2)</sup> Our cement raw materials operations in the U.S. include one limestone quarry that also produces hard rock aggregates.

<sup>(3)</sup> Although we consolidate CHP into our consolidated financial statements under IFRS, we do not control the raw materials used in our operations in the Philippines. Such raw materials are primarily supplied by APO Land & Quarry Corporation ("ALQC") and Island Quarry and Aggregates Corporation ("IQAC"). ALQC is wholly owned by Impact Assets Corporation, which is a corporation in which we own a 40% equity interest.

IQAC is wholly owned by Albatross Holdings, which is a corporation in which we own a 40% equity interest.

As of December 31, 2016, we operated 305 aggregates quarries across our global operations dedicated to serving our ready-mix and aggregates businesses. We estimate that our proven and probable aggregates reserves, on a consolidated basis, have an average remaining life of 37 years, assuming 2012-2016 average production (last five years average aggregates production).

The table set forth below presents our total permitted proven and probable aggregates reserves by geographic segment and material type extracted or produced in our aggregates quarries operations. We note that the locations of our aggregates reserves differ from those of our cement reserves.

		Number of	Prop Surf (hect	face	Reserv	es (Millio	n tons)	Voors to	2016 Annualized	5 years aver.	Own
Location	Mineral	quarries	Owned	Leased	Proven	Probable	Total	depletion	Production	Production	Use
Mexico	Hardrock	12	755	135	212	251	463	45	10.7	10.4	56%
	Others	3		48	2	12	14	8	1.9	1.8	66%
United States	. Hardrock	18	13,143	3,520	668	55	723	33	24.6	22.2	35%
	Sand &										
	Gravel	10	2,350	2,807	86	3	88	17	5.8	5.1	46%
	Others	45	4,895	4,847	388	57	445	36	12.5	12.3	36%
Europe											
United Kingdom	Hardrock Sand &	12	470	795	411	_	411	45	9.6	9.1	50%
	Gravel	2	157	_	2		2	8	0.3	0.2	46%
			2,696	1,669	137	127	263	8 27	8.6		46%
Commons	Others	66 2	2,090	235	12	35	203 47	32		9.7	19%
Germany	Hardrock Sand &	2	20	233	12	33	47	32	1.2	1.5	19%
	Gravel	23	1,613	547	55	77	132	19	5.8	7.1	13%
	Others	1	32	_		_	1	5	0.1	0.1	79%
France	Hardrock Sand &	12	97	458	107	29	136	31	3.6	4.4	20%
	Gravel	28	760	923	112	33	145	25	4.9	5.8	31%
	Others	5	386	594		7	27	15	0.9	1.8	61%
Spain	. Hardrock	8	289	144		151	312	385	0.7	0.8	56%
Spain	Sand &	Ü	_0,		101	101	0.12	000	0.,	0.0	0070
	Gravel	2	449	_	47	1	47	142	_	0.3	49%
Rest of Europe	Hardrock	6	_	84		54	82	42	2	2	56%
1	Sand &										
	Gravel	4	324	170	7	4	11	3	3.5	4.1	43%
	Others	14	464	143	51	49	100	21	4.3	4.8	9%
SAC											
	Sand &										
Colombia	Gravel	7	592	_	25	5	30	40	0.7	0.7	100%
	Others	_	_	_	_	_	_	_			0%
Rest of SAC	•										
	Hardrock	5	181	164	41	620	660	431	0.4	1.5	0%
	Sand &	2		200	0	2	10	40		0.2	0.07
	Gravel	3 7		200 57	8	2 2	10		0.1	0.3	0%
Asia, Middle East and	Others	/	_	37	_	2	2	15	0.1	0.1	47%
Africa		_								_	
Philippines(1)	. Hardrock	3	94	24	177	_	177	88	0.4	2	11%
and Africa	Hardrock	5	_	389	83	19	102	25	10.4	11.9	43%
	Sand &										
	Gravel	2	_	26		_	2	25	0.1	0.2	43%
<b>CEMEX Consolidated</b>	Hardrock	83	15,055	5,948	1,900	1,215	3,114	47	63.6	65.8	43%
	Sand &										
	Gravel	81		4,673		124	467	19	21.1	24	35%
	Others	<u>141</u>	$\overline{}$	7,356		253	853		28.5	30.6	38%
	Totals	305	29,773	17,976	2,841	1,592	4,434	37	113.1	120.4	

(1) Although we consolidate CHP into our consolidated financial statements under IFRS, we do not control the raw materials used in our operations in the Philippines. Such raw materials are primarily supplied by ALQC and IQAC. ALQC is wholly owned by Impact Assets Corporation, which is a corporation in which we own a 40% equity interest. IQAC is wholly owned by Albatross Holdings, which is a corporation in which we own a 40% equity interest.

## **Our Vision**

CEMEX has a general vision and value creation model comprised of the following five elements: (i) purpose, (ii) mission, (iii) values (iv) strategy, and (v) operating model.

**PURPOSE**. We expect to build a better future for our employees, our customers, our shareholders, and the communities where we live and work.

**MISSION**. We intend to create sustainable value by providing industry-leading products and solutions to satisfy the construction needs of our customers around the world.

**VALUES.** We intend to: (i) ensure the safety of all our employees by being accountable to each other for our actions and behaviors and trying to be an industry leader by example; (ii) focus on our customers by aligning ourselves closely with their business and their needs and, following through with our commitments, resolving problems quickly and making it easy to do business with us; (iii) pursue excellence in all aspects of our business and interactions with customers by challenging ourselves to constantly improve and build upon our strong reputation around the world for quality and reliability; (iv) work as one CEMEX by leveraging on our collective strength and global knowledge to share best practices, replicate good ideas and collaborate across boundaries; and (v) act with integrity by remaining honest and transparent in all our interactions, complying with our code of ethics, and caring for our people, communities and natural resources.

**STRATEGY**. To achieve our mission, our strategy is to create value by building and managing a global portfolio of integrated cement, ready-mix concrete, aggregates and related businesses. The four pillars that underpin our strategy are (i) valuing our employees as our main competitive advantage, (ii) helping our customers succeed, (iii) pursuing markets that offer long-term profitability, and (iv) ensuring sustainability is fully embedded in our business.

# Value people as our main competitive advantage

We aspire to hire excellent employees, and our team's health, safety and professional growth are top priorities. We develop leaders and encourage them to create new ways of thinking and acting, while assessing risks and opportunities. We foster an open dialogue in our interactions to align and achieve greater results.

Placing Health and Safety First. To ensure we are meeting our goals, four core principles guide our decisions and actions: (i) ensuring nothing comes before the health and safety of our employees, contractors, and communities; (ii) making health and safety a personal responsibility by looking after ourselves and each other; (iii) striving to create safe workplaces; and (iv) maintaining accountability for health and safety practices.

We are working towards our ultimate target of zero injuries in our operations worldwide. In 2016, our Employee Lost-Time Injury (LTI) Frequency Rate was 0.6 (based on number of employees per million hours worked), bringing us closer to our goal of reducing such rate to 0.3 or less by 2020. We are encouraged to see that 95% of CEMEX operations experienced no fatalities or lost-time-injuries in 2016. We recognize the remaining 5% is still considerable. However, we consider that the overall direction is positive. Also in 2016, CEMEX Total Recordable Injury (TRI) Frequency Rate continued to decline, reaching 4.1 compared to 4.5 in 2015 and 5.6 in 2014. Two regions and 13 countries reduced their TRI Rates, with six countries maintaining a rate of zero. In addition, the global Employee Sickness Absence Rate for CEMEX improved from 2.1 to 1.8 in 2016.

We had 20 fatalities in 2016 – three employees, 10 contractors and seven third parties. From these, 75% occurred away from our installations (off-site) and 60% were road traffic related. Our goal is to have zero injuries and fatalities. To reach this objective, we are actively working to identify and mitigate risks. Each injury and fatality is analyzed to determine the root cause and prevent future incidents. Most of these fatalities were caused by moving vehicle incidents (i.e., collisions involving contractors' trucks). To prevent further fatalities, we have invested in technology and training programs to encourage our employees and contractors to use proper driving techniques for their safety and the safety of others. For example, we are reinforcing our defensive driver trainings while introducing a stronger driver certification scheme.

The following table sets forth our performance indicators with respect to safety by geographic location for the year ended December 31, 2016 and accounts for information that became available in March 2017:

	Mexico	United States	Europe	SAC	Asia, Middle East and Africa	Total CEMEX
Total fatalities, employees, contractors and other third						
parties (#)	13	1	1	3	2	20
Fatalities employees (#)	2	0	0	1	0	3
Fatality rate employees(1)	2.2	0.0	0.0	1.7	0.0	0.7
Lost-Time injuries (LTI), employees (#)	11	20	17	8	4	60
Lost-Time injuries (LTI), contractors (#)	18	6	18	7	2	53
Lost-Time injury (LTI) frequency rate, employees per						
million hours worked	0.4	0.9	0.8	0.5	0.5	0.6

<sup>(1)</sup> Incidents per 10,000 people in a year.

We attempt to ensure that all of our employees have the correct knowledge, skills and experience to perform their jobs safely through our investment in programs that provide employees at all levels with health and safety training. As part of our manager-training program, executives and supervisors must complete our Health and Safety ("H&S") Academy. Launched in 2016, our global H&S Academy is designed to enhance the leadership skills of our line managers and supervisors and to ensure that H&S is our top priority across our organization, from our production plants to our corporate offices. Already commenced in 21 countries, the H&S Academy's two-day "Foundation" module prepares executives from different roles and backgrounds to share H&S practices with their teams throughout CEMEX. We intend to conduct further H&S trainings for our managers.

In addition, our employees must complete E-LEGACY training, which is a non-technical, interactive program that helps front-line employees assess risks and integrate safe and healthy practices into their day-to-day activities, promoting a strong H&S culture within our organization. Our H&S committees, which are comprised of representatives from front-line workers, line supervisors, managers, and unions, meet regularly to discuss H&S-related concerns and to help reinforce H&S practices and programs.

Furthermore, we have established interconnected global H&S networks, taskforces, and forums to ensure that we work together through a coordinated, consistent, and collaborative approach to reach our company-wide goal of zero injuries: (i) the H&S Functional Network; (ii) the Global H&S Council; (iii) Six Global Taskforces; and (iv) a Global Health Forum.

We continue to enhance our health practices and reduce our safety risks to strengthen our H&S culture. H&S is considered in each and every phase of product development, from design to disposal. We abide by all applicable legislation and H&S requirements when designing our products and have developed Material Safety Data Sheets that describe potential hazards and precautions to take when handling each of our products. For instance, with our ¡Avísame! ("Warn me!") campaign in Spain, we encourage our employees to take responsibility for the safety of others. Beyond focusing on their own safety, this campaign encourages our employees to warn their colleagues of potential safety risks, while encouraging such employees to report unsafe

conditions to their managers, as well. By placing the ¡Avísame! sticker on their helmets, our employees signify that they are receptive to correction or warning from their peers whenever they encounter hazardous situations.

Attracting and Retaining Talent. We aim to offer the programs, benefits, and work environment that attract and retain talented employees. Our approach to talent management is founded on three pillars: (i) employ the right people, in the right place, at the right time to perform the right job to achieve our strategy; (ii) enable a high-performing and rewarding culture to deliver sustainable business value in a safe, ethical workplace; and (iii) build and develop our workforce capabilities to confront challenges and pursue excellence.

As we transform and expand, one of our main objectives is to develop people with the potential to fill key leadership positions—increasing their experience and capabilities to equip them to succeed in increasingly challenging roles. Through this process, we work to improve our employees' commitment to our company by helping them meet their own career development expectations and preparing them for key roles as they face critical challenges in their professional development. Our succession management process enables us to build a talented pool of leaders with the skills and understanding of our business fundamentals to continue our pursuit of excellence. Through ongoing training and development opportunities, our employees are taught new skills and their expertise is deepened in several critical areas, including H&S, customer-centric capabilities, environmental conservation and awareness, leadership development, and stakeholder engagement.

We strive to foster a dynamic, high-performance environment, where open dialogue is encouraged and rewarded. Apart from competitive compensation, more than 80% of our global workforce receives health and life insurance benefits beyond those required by local law. Approximately half of our global workforce receives retirement provision benefits above local requirements, and more than 60% of our operations receive additional funds for disability and invalidity coverage beyond what is required by local law.

## Helping our customers succeed

Our core strategic goal is to become the most customer-oriented company in our industry—serving as our clients' best option in every market while delivering a superior customer experience. To achieve this goal, we have focused on increasing customer service by creating a customer centricity network and beginning a digital transformation of our customer service.

Fostering a Customer-Centric Organization. Our goal is to put our clients at the center of our business. As we work toward this goal, we focus on five key areas: (i) creating a superior customer experience; (ii) updating and simplifying key internal processes and policies; (iii) developing and implementing digital solutions; (iv) measuring customer satisfaction systematically; and (v) continuously innovating and adding value for our customers.

To create a superior customer experience, we are strengthening our capabilities and leadership style, involving our clients in our decision-making and implementing new ways to work and collaborate that focus on problem solving and innovation. We also are reinforcing our training and aligning our performance measurements to deliver on our customers' expectations.

To continually satisfy and better understand our customers, we conduct a thorough analysis of our clients in our key markets and classify them in segments and sub-segments. We identify their most relevant product and service attributes. We also identify segments and opportunities where we could better serve our customers, while improving our profitability. We then customize our value propositions based on segment characteristics and needs, so they are tailored to the unique requirements of each individual customer. To further enhance our customer-centric organizational culture, we launched the Customer Centricity Foundations track with three main objectives: (i) fostering a customer-centric organization by engraining customers' needs into the core work philosophy throughout CEMEX; (ii) making doing business with us an effective, easy, and enjoyable experience for our customers, while striving to exceed their needs; and (iii) setting the management system to enable a CEMEX customer-centric evolution that incorporates ongoing monitoring, measurement, and improvement to achieve a superior customer experience.

We are undertaking a digital transformation designed to substantially improve our customer experience, while enhancing our operations and increasing our business efficiencies. Our digital solutions, including mobile applications, will improve our interaction and enable real-time engagement with our customers across a range of online transactions—including registering and requesting credit, placing orders, receiving products and services, invoicing, and complaint resolution.

Beyond leveraging our own development experience, we are working with process and technology specialists from Apple, Inc., International Business Machines Corporation ("IBM"), and Neoris. For example, beginning in early 2017, we are partnering with IBM iX (Interactive Experience) to launch a suite of customized mobile applications to enhance our client experience. Following a "speed-to-market" approach, we will pilot, launch, user test, and adjust solutions to meet our clients' needs before scaling the applications for worldwide deployment. Our digital transformation will fundamentally change not only how our entire company does business, but also how foremen, field operations managers, cement masons, concrete finishers and other construction professionals work and interact with us.

*Providing Superior and Sustainable Products, Solutions and Services.* Our collaborative sustainability projects address areas such as carbon capture, alternative raw materials, high temperature solar industrial processes, and energy efficiency, among others.

We continue to develop new concrete technologies and value-added aggregates, improve construction systems, and provide novel building and paving solutions. However, in addition to launching new products, we are interested in following the adoption of solutions that we presented in previous years. For us, sustainability involves not only improving our impact on the environment, but also our impact on day-to-day life in the communities in which we operate. Indeed, this principle led to the IFC's decision to grant funding for our research and development ("R&D") projects that are focused on sustainability—providing "climate-smart" solutions across emerging markets.

We leverage our innovative approach and agility to develop superior building products and solutions that perform at high standards across our operations. Led by CEMEX Global R&D in Switzerland in collaboration with our Cement and Ready-Mix Technology Center in Mexico, our team works to anticipate and understand society's trends in order to create innovative, sustainable construction solutions that satisfy our customers' current and future needs, while challenging the current technological landscape.

We established a new Green Building Management and Certification Policy to mitigate potential environmental impacts associated with the design, construction, and operation of our buildings. This policy ensures that the planning, design, construction, management, renovation and demolition activities of companyowned and leased facilities are carried out in a sustainable manner. This policy also mandates that new facilities achieve a green building certification, such as LEED or BREEAM. Moreover, we support the development of durable infrastructure with quality products, construction practices, and maintenance that have minimal environmental impact. Through revolutionary advances in concrete technology, we are aiming to position ourselves at the forefront of the industry, designing and developing unique, integrated, value-added construction solutions that defy the status quo and meet our clients' evolving needs now and into the future.

Our expertise in building efficient homes with tailor-made, adaptable systems has contributed to, as of December 31, 2016, the construction of more than 4,100 affordable homes and/or energy-efficient buildings, representing approximately 75,000 square meters of livable space. Our wall systems and integrated housing solutions offer multiple advantages that improve the sustainability, speed, efficiency, and profitability of housing construction.

# Pursue markets that offer long-term profitability

We operate in markets where we can add value for our employees, our customers and our shareholders. We intend to focus on those markets that offer long-term profitability. We believe that a geographically diverse

portfolio of assets provides us with the opportunity for significant value creation through profitable organic growth over the medium- to long-term. Consequently, we are selective and strategic about where we operate. Our business portfolio is particularly focused on geographies that combine strong fundamentals, ranging from economic growth potential to per-capita cement consumption, population growth, degree of urban development and political stability.

Leveraging our global presence and extensive operations worldwide, we intend to continue focusing on our core cement, aggregates, ready-mix concrete and related businesses. By managing our core operations as one vertically integrated business, we not only capture a significant portion of the cement value chain, but also create value for our customers by offering comprehensive building solutions. Historically, this strategic focus has enabled us to grow our existing businesses, particularly in high-growth markets and with specialized, high-margin products.

Complementary Businesses. We participate selectively in complementary businesses, including, but not limited to, the development of alternative and renewable sources of energy, concrete pavement solutions, housing, prefabricated concrete products, admixtures. We believe such projects allows us to provide valuable services to our customers, grow our core markets, develop our competitive advantage, and improve our overall performance.

On March 14, 2017, we also announced the launch of CEMEX Ventures, our open innovation and venture capital unit designed to lead the evolution of the construction industry. CEMEX Ventures will leverage CEMEX's knowledge of the business with new, leading-edge technologies and platforms and develop opportunities in key focus areas outside of CEMEX's core business, such as urban development, connectivity improvements within the construction value chain, new construction trends and technologies, and the creation and development of new project finance resources.

## Ensure sustainability is fully embedded in our business

Our sustainability efforts begin with CEMEX, S.A.B. de C.V.'s Board of Directors and are then facilitated across our entire organization. CEMEX, S.A.B. de C.V.'s Sustainability Committee is comprised of three of CEMEX, S.A.B. de C.V.'s Board of Directors members reporting directly to CEMEX, S.A.B. de C.V.'s Board of Directors, along with the Audit and the Corporate Practices & Finance Committees. The Sustainability Committee is supported by our Corporate Sustainability function, which reports to a member of our Executive Committee. To ensure sustainability is embedded into our entire business strategy, we have coordinators representing each geographical region where we operate. In parallel, our Global Sustainability Functional Network works to implement our core sustainability initiatives across all of our operating regions and business lines.

Implementing a High-Impact Social Strategy. As a global company, we have included Corporate Social Responsibility (CSR) as a fundamental component of our business model—aligned with our mission to build a better future by creating lasting value for all of our stakeholders. As we provide high-quality, innovative building materials and wide-ranging construction solutions for our customers, we must also support society's development needs and contribute to the well-being of the communities in which we operate.

We are committed to advancing constructive change as envisaged in the ambitious agenda put forth in the United Nations' Sustainable Development Goals ("SDGs"). We believe that achieving the SDGs is not only the responsible thing to do; it is also strategically relevant from a growth standpoint, as such actions foster new business opportunities, build markets and relationships and improve our environment and our stakeholders' quality of life. Aligned precisely with SDGs 1, 4, 5, 8, and 11, our sustainability strategy's social priorities are particularly focused on our contribution to end poverty, achieve gender equality, provide decent employment, foster economic growth and develop sustainable communities. To these ends, we have established a high-impact social strategy that fosters societal intelligence, guides our participation in international and business

organizations' initiatives, develops programs designed to create greater benefits for our communities, incorporates knowledge for our commercial endeavors and, ultimately, adds to our reputation as a socially responsible company.

Our efforts are channeled through the co-creation of social models that enable solutions to alleviate significant challenges around the world. To achieve our goals, we create strategic alliances that foster collaboration with key partners—multiplying the benefits for our communities.

Furthermore, we are committed to bolstering our communities' fundamental capacities for long-term self-support and upward mobility. Our mission is to serve as a key contributor to community development and an engine for economic growth through innovative and sustainable solutions. Through our community-involvement efforts across, we have learned that self-sufficiency and practical skills development are integral to the long-term prosperity of individuals and communities. However, in many of our markets, poor access to jobs, skills training, and education opportunities limit individuals' ability to meet their basic needs. To address these challenges, we have developed a number of programs that increase communities' access to building materials for their homes, while providing mechanisms to improve training and employment options.

Aligned with SDG 4, "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all," we leverage our business capabilities, our network of employees, and strategic alliances to create public value and provide diverse groups with numerous opportunities to achieve their potential for growth and prosperity. Equally, we recognize the challenge posed by SDG 11, "Make cities and human settlements inclusive, safe, resilient and sustainable." To help address this social need, we have developed social and inclusive businesses through models co-created with our communities to provide specific solutions for public spaces and affordable housing that simultaneously combat urban poverty and contribute to the achievement of SDG 1, "End poverty in all its forms everywhere."

Patrimonio Hoy, our flagship inclusive business, was founded to provide low-income families with access to financing, building materials, technical advice, and logistical support—allowing such families to build or expand their homes more quickly and efficiently. Started in Mexico, Patrimonio Hoy has expanded to more than 100 of our offices across Latin America, including Costa Rica, Colombia, the Dominican Republic, and Nicaragua. During 2016, we reached more than 46,000 families, bringing the accumulated total to approximately 570,000 families since 1998. In 2016, Patrimonio Hoy built approximately 231,000 square meters of living space, resulting in a total of approximately 4.3 million square meters of living space since 1998. According to our calculations, the Patrimonio Hoy initiative generated an external social value of approximately U.S.\$65 million.

In 2016, we added 17 new productive centers for self-employment in Mexico, six in Colombia, five in Costa Rica and one in Panama. In total, we operated 154 of these centers at the end of 2016. In 2012, CEMEX also became a founding partner of New Employment Opportunities, an initiative to prepare young people, particularly disadvantaged young people, for entry-level jobs in Latin America and the Caribbean.

Finally, we are active members of the UN Global Compact's Advisory Group on Supply Chain Sustainability and the Cement Sustainability Initiative's supply chain group. This keeps us involved in changing policies, metrics, and practices within our industry. We have also developed strong sustainability relationships with our suppliers. Since its inception in 2010, our Supplier Sustainability Program has extended our commitment to sustainability to our supply chain, communicating and promoting responsible practices. This program integrates the basic sustainability requirements with which our suppliers must comply. These requirements express our corporate sustainability value statements, included in our Human Rights Policy, Code of Conduct when Doing Business with Us, and Code of Ethics.

*Pursuing Excellence in Environmental Management.* We believe the pursuit of excellent environmental practices benefits sustainable growth. In addition to our Board-level Sustainability Committee, our Global

Environmental Council, which is composed of our primary environmental executives responsible for each of our operating regions, shares new trends, proposals and best practices to identify, inform and tackle key environmental management concerns.

We are committed to contribute to climate change mitigation and its consequences. For decades, as part of our carbon emissions reduction strategy, we have focused on using low-emission alternatives to traditional fossil fuels, decreasing our clinker factor, promoting clean energy, and increasing energy efficiency across our operations. To this end, we have continuously sought to increase our use of low-carbon alternative fuels, which represented 23.3% of our total fuel mix in 2016.

We are reducing the  $CO_2$  footprint of our cementitious products by replacing traditional energy-intensive clinker with alternative raw materials, such as slag, fly ash, and pozzolans. In 2016, our overall clinker factor was 78.4%, around seven percentage points less than in 1990. Also, our emissions of  $CO_2$  per ton of cementitious products in 2016 dropped by 20% compared to such emissions in 1990. Overall, in 2016, we avoided almost 7.3 million tons of  $CO_2$  emissions as a result of our mitigation efforts, which is comparable to the annual average carbon emissions from 1.3 million passenger vehicles.

In 2016, we received an A- score from the CDP (formerly Carbon Disclosure Project). According to the CDP's new evaluation system, companies now receive a single letter score from A to D-. This score assesses progress across four categories: Disclosure, Awareness, Management and Leadership. The CDP has recognized that we belong to the leading group of companies in the sustainability field. Also, in 2016, 25% of our cement operations' power supply came from renewable sources. This percentage includes all electricity from renewable sources that we contracted directly, plus the renewable energy share of the grid power that our plants consume.

For more than a decade, we have worked to identify, document and register projects that mitigate carbon emissions and generate equivalent offsets. We have achieved approval for 19 CO<sub>2</sub> offset projects registered under the Clean Development Mechanism and four CO<sub>2</sub> offset projects under the Verified Carbon Standard, representing a total reduction potential of nearly three million tons of CO<sub>2</sub> per year. These initiatives are located in Colombia, Costa Rica, Mexico, Panama, the Dominican Republic, Egypt, and the United States.

We are determined to meet the demands of a growing population through effective and secure methods to alleviate the social, economic and environmental issues associated with municipal waste management. We are building global support for the enactment and enforcement of legislation that promotes co-processing of waste, which cannot otherwise be reduced, reused or recycled.

We are a prominent industry advocate and user of alternative fuels, displacing traditional fuels like petcoke and coal with low- or zero-carbon alternatives such as municipal solid waste, tires, and biomass residues. As of December 31, 2016, 92% of our cement plants co-processed alternative fuels for a total fossil fuel substitution rate of 23.3%, which avoided the use of 1.6 million tons of coal. Moreover, eight of our cement plants that use alternative fuels surpassed a substitution rate of 50% in their fuel mix.

We have the expertise to responsibly source, process, store, and recover energy from alternative fuels. By increasing the co-processing of these fuels in our cement plants, we intend to help overcome challenges such as climate change, waste management and fossil fuel depletion. We maintain our efforts to reach a 35% Alternative Fuels Target by 2020.

We dispose of waste generated in our production processes in accordance with local regulations. To reduce most of the waste generated from our processes, we maximize our reuse of clinker kiln dust in our production loop, largely avoiding landfill disposal. To realize the financial and environmental benefits of waste, we monitor, minimize, reuse, and recycle our waste whenever possible. In 2016, 94% of the waste generated by our production processes was recovered, reused or recycled. The remaining material was sent to disposal sites. Moreover, the disposal of our non-hazardous waste, which comprises the majority of the waste created in our operations, decreased approximately 40% from 2015 to 2016, while our hazardous waste disposal declined by 9% in 2016 compared to 2015.

CEMEX Environmental Management System ("EMS"). We use EMS to evaluate and facilitate consistent and complete implementation of risk-based environmental management tools across our operations. EMS consists of key mechanisms for environmental impact assessment, stakeholder engagement, and accident response based on input from a range of environmental and biodiversity specialists.

As of December 31, 2016, 98% of our cement plants, 88% of our ready-mix concrete operations and 86% of our aggregates quarries have implemented either EMS or equivalent programs. Our goal is for all of CEMEX facilities to be 100% compliant with our internal environmental criteria.

We are committed to reducing our environmental footprint by working to monitor emissions, improve our measurement methods, adapt to new and more stringent air emissions regulations, invest accordingly and execute required training. We strive to go beyond local regulations and set ambitious targets for emissions mitigation.

In 2016, we invested US\$80 million in sustainability-related projects at our global operations, including more than 70 projects to monitor and reduce our air emissions.

In 2016, the International Finance Corporation ("IFC"), a member of the World Bank Group, granted CEMEX a loan of €106 million to support the company's sustainable investment programs in emerging markets. We have allocated approximately 60% of the funds for projects related to the reduction of our greenhouse gas emissions, while we allocated the remainder to improve our overall air emission controls.

*Our environmental incidents management*. We minimize our emissions and reduce the likelihood of spills and water contamination. We are prepared to respond to any emergency that may pose a threat to our operations and communities. We consistently record and report incidents at every level of our business to identify recurring root causes and share corrective actions based on best practices.

In particular, we recognize that reporting environmental incidents is the first step to reducing their occurrence and severity. Our rigorous efforts to standardize the implementation of our environmental management processes enabled us to avoid the occurrence of Category 1 incidents during 2016. Moreover, our Category 2 incidents decreased significantly, from 436 in 2015 to 64 in 2016. This significant drop was mainly due to updating CEMEX Environmental Incident Reporting Procedure, wherein the circumstances of specific incidents were recorded in the context of their corrective action to ensure better follow-up and corresponding remediation.

*Preserving land, water and biodiversity.* The preservation of land, biodiversity and water plays a key role in our long-term resource management strategy.

To protect water and enable our business to succeed, we are increasing our water efficiency and minimizing our water waste through the implementation of our Corporate Water Policy. This policy includes standardization of our water measurement based on the Water Protocol developed in coordination with the International Union for Conservation of Nature (IUCN). Additionally, we comply with the Cement Sustainability Initiative's (CSI) Guidelines for Environmental & Social Impact Assessment for all of our quarry developments. According to these guidelines, we assess all of our social and environmental impacts using different methods and techniques, including the requirement to evaluate cumulative effects on biodiversity.

**OPERATING MODEL**. We aim to operate effectively and achieve the greatest possible value by leveraging our knowledge and scale to establish best practices and common practices worldwide.

## **Financial Strategy**

#### Regain our Investment Grade.

In light of the global economic environment and our substantial amount of indebtedness, we have been focusing, and expect to continue to focus, on optimizing our operations by growing our market positions and our core business and implementing our pricing policies, on strengthening our capital structure and regaining financial flexibility through reducing our debt and cost of debt, improving cash flow generation and extending maturities.

We plan to maintain and grow our market positions in cement, ready-mix concrete and aggregates by being one of the most customer-centric companies in the industry. We also expect to implement pricing initiatives for our products and receive compensation through fees for the services we provide that should allow us to improve our overall profits. We anticipate advocating and promoting the increased usage of cementitious based products, to grow our aggregate footprint and replace our aggregate reserves in a manner, which ensures the sustainability of our business, and to operate in the most capital and cost-efficient manner possible.

We have a long history of successfully operating world-class cement production facilities in developed and emerging markets and have demonstrated our ability to produce cement at a lower cost compared to industry standards in most of these markets. We continue to strive to reduce our overall production related costs for all of our products and corporate overhead through disciplined cost management policies and through improving efficiencies by removing redundancies. We have implemented several worldwide standard platforms as part of this process and have also started different initiatives, such as a system designed to improve our operating processes worldwide. In addition, we implemented centralized management information systems throughout our operations, including administrative, accounting, purchasing, customer management, budget preparation and control systems, which have helped us achieve cost efficiencies, and we also have a strategic agreement with IBM expected to improve some of our business processes. We have also transferred key processes, such as procurement and trading, from a centralized model to a regional model and are simplifying and delayering our business to accelerate decision-making and maximize efficiency. In a number of our core markets, such as Mexico, we launched aggressive initiatives aimed at reducing the use of fossil fuels, consequently reducing our overall energy costs.

Furthermore, significant economies of scale in key markets often allow us to obtain competitive freight contracts for key components of our cost structure, such as fuel and coal, among others.

Through a worldwide import and export strategy, we will continue to seek to optimize capacity utilization and maximize profitability by redirecting our products from countries experiencing economic downturns to target export markets where demand may be greater. Our global trading system enables us to coordinate our export activities globally and take advantage of demand opportunities and price movements worldwide allowing our regions to have access to information required to execute our trading activities. Should demand for our products in the United States improve, we believe we are well-positioned to service this market through our established presence in the southern and southwestern regions of the country and our ability to import to the United States.

Our industry relies heavily on natural resources and energy, and we use cutting-edge technology to increase energy efficiency, reduce carbon dioxide emissions and optimize our use of raw materials and water. We are committed to measuring, monitoring and improving our environmental performance. In the last few years, we have implemented various procedures to improve the environmental impact of our activities as well as our overall product quality, such as a reduction of carbon dioxide emissions, an increased use of alternative fuels to reduce our reliance on primary fuels, an increased number of sites with local environmental impact plans in place and the use of alternative raw materials in our cement.

## Global Cost-Reduction and Pricing Initiatives

In response to decreased demand in most of our markets as a result of the global economic recession, in 2008 we identified and began implementing global cost-reduction initiatives intended to reduce our annual cost structure to a level consistent with the decline in demand for our products. Such global cost-reduction initiatives encompass different undertakings, including headcount reductions, capacity closures across the cement value chain and a general reduction in global operating expenses. During the past years, CEMEX has launched a company-wide program aimed at enhancing competitiveness, providing a more agile and flexible organizational structure and supporting an increased focus on the company's markets and customers. For the year ended December 31, 2016, we reached our target that had been set out for the 2016 year of approximately U.S.\$150 million in annualized cost savings through the implementation of our cost reduction program, which

contemplated an improvement in underperforming operations, a reduction in selling, general and administrative costs and the optimization of the company's organizational structure.

In connection with the implementation of our cost-reduction initiatives, and as part of our ongoing efforts to eliminate redundancies at all levels and streamline corporate structures to increase our efficiency and reduce operating expenses, as well as our divestitures, we have reduced our global headcount by approximately 26%, from 56,791 employees as of December 31, 2008 (excluding personnel from our operations in Australia sold in 2009 and our operations in Venezuela, which were expropriated in 2008) to 41,853 employees as of December 31, 2016.

Also as part of these initiatives, since 2009, we have temporarily shut down (some for a period of at least two months) several cement production lines in order to rationalize the use of our assets and reduce the accumulation of our inventories. We have also announced the permanent closure of some of our cement plants, such as our Davenport cement plant located in northern California in 2010. Similar actions were taken in our ready-mix concrete and aggregates businesses. Such rationalizations included, among others, our operations in Mexico, the United States, Spain and the United Kingdom.

Furthermore, during 2016, we achieved energy cost-savings by actively managing our energy contracting and sourcing, and by increasing our use of alternative fuels. We believe that these cost-saving measures better position us to quickly adapt to potential increases in demand and thereby benefit from the operating leverage we have built into our cost structure.

We have also introduced a comprehensive pricing strategy for our products that is expected to more fully reflect and capture the high value-creating capability of our products and services. Our strategy focuses on value enhancement, optimizing gains in customer relationships and in generating sufficient returns that would allow us to reinvest in our business. Under this strategy we are establishing internal procedures and guidelines that are expected to support our approach to pricing our different products and services.

# **Optimizing Capital Expenditures**

During past years, we had reduced capital expenditures related to maintenance and expansion of our operations in response to weak demand for our products. Such reductions were implemented to maximize our free cash flow generation available for debt service and debt reduction, consistent with our ongoing efforts to strengthen our capital structure, improve our conversion of Operating EBITDA to free cash flow and regain our financial flexibility. During 2015 and 2016, as a result of a higher demand for our products in certain markets in which we operate, we increased capital expenditures related to maintenance and expansion of our operations to approximately U.S.\$764 million and U.S.\$685 million, respectively, from approximately U.S.\$689 million in 2014. Pursuant to the Credit Agreement, we are prohibited from making aggregate annual capital expenditures in excess of U.S.\$1 billion (excluding certain capital expenditures, joint venture investments and acquisitions by each of CEMEX Latam and CHP and their respective subsidiaries), which capital expenditures, joint venture investments and acquisitions at any time then incurred are subject to a separate aggregate limit of U.S.\$500 million (or its equivalent) for each of CEMEX Latam and its subsidiaries and CHP and its subsidiaries, in each case, the amounts of which allowed for permitted acquisitions and investments in joint ventures cannot exceed U.S.\$400 million per year. We believe that these restrictions on capital expenditures do not diminish our world-class operating and quality standards and we may opportunistically increase capital expenditures in some of the markets in which we operate, if necessary, to take advantage of improved market conditions.

#### **User Base**

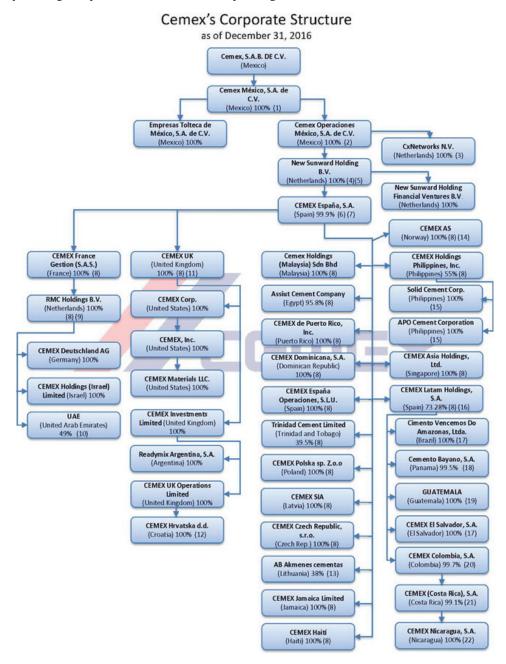
Cement is the primary building material in the industrial and residential construction sectors of most of the markets in which we operate. The lack of available cement substitutes further enhances the marketability of our product. The primary end-users of cement in each region in which we operate vary but usually include, among

others, wholesalers, ready-mix concrete producers, industrial customers and contractors in bulk. Additionally, sales of bagged cement to individuals for self-construction and other basic needs are a significant component of the retail sector. The end-users of ready-mix concrete generally include homebuilders, commercial and industrial building contractors and road builders. Major end-users of aggregates include ready-mix concrete producers, mortar producers, general building contractors and those engaged in road building activity, asphalt producers and concrete product producers. In summary, because of their many favorable qualities, builders worldwide use our cement, ready-mix concrete and aggregates for almost every kind of construction project, from hospitals and highways to factories and family homes.

As of December 31, 2016, we did not depend on any of our existing customers to conduct our business and the loss of any of our existing customers individually would not have a material adverse effect on our financial condition or results of operations. For the period ended December 31, 2016, none of our customers represented more than 10% of our consolidated net sales.

# **Our Corporate Structure**

CEMEX, S.A.B. de C.V. is an operating and also a holding company, and in general CEMEX operates its business through subsidiaries that, in turn, hold interests in CEMEX's cement and ready-mix concrete operating companies, as well as other businesses. The following chart summarizes CEMEX's corporate structure as of December 31, 2016. The chart also shows, for each company, CEMEX's approximate direct or indirect percentage equity ownership or economic interest. The chart has been simplified to show only some of CEMEX's major holding companies and/or operating companies in the main countries in which CEMEX operates, and/or relevant companies in which we hold a significant interest, and does not include all of CEMEX's intermediary holding companies and all CEMEX's operating subsidiaries.



- (1) Includes an approximately 99.88% interest pledged or transferred to a security trust as collateral for the benefit of certain secured creditors of CEMEX and certain of its subsidiaries.
- (2) Includes an approximately 99.99% interest pledged or transferred to a security trust as collateral for the benefit of certain secured creditors of CEMEX and certain of its subsidiaries.
- (3) CxNetworks N.V. is the holding company of the global business and IT consulting entities, including Neoris N.V.
- (4) Includes a 100% interest pledged or transferred to a security trust as collateral for the benefit of certain secured creditors of CEMEX and certain of its subsidiaries.
- (5) Includes Cemex Operaciones México 59.64% interest and CTH 40.36% interest. CEMEX indirectly holds 100% of Cemex Operaciones México and CTH.
- (6) Includes New Sunward, CEMEX's and CTH's interest, and shares held in CEMEX España's treasury.
- (7) Includes an approximately 99.63% interest pledged or transferred to a security trust as collateral for the benefit of certain secured creditors of CEMEX and certain of its subsidiaries.
- (8) Includes CEMEX España's direct or indirect interest.
- (9) Includes CEMEX France Gestion (S.A.S.)'s ("CEMEX France") 94.75% interest and CEMEX UK's 5.25% interest.
- (10) Represents CEMEX España's indirect economic interest in three companies incorporated in the United Arab Emirates, CEMEX Topmix LLC, CEMEX Supermix LLC and CEMEX Falcon LLC. CEMEX España indirectly owns a 49% equity interest in each of these companies, and CEMEX España indirectly holds the remaining 51% of the economic benefits through agreements with other shareholders.
- (11) Includes CEMEX España's 69.39% interest and CEMEX France's 30.61% interest.
- (12) Divestment of CEMEX Hrvatska d.d. was expected to be completed during the first half of 2017, but the divestment will not be made and CEMEX Hrvatska d.d. remains one of our subsidiaries.
- (13) Represents CEMEX España's indirect 37.84% and 11.76% interest in ordinary and preferred shares, respectively.
- (14) CEMEX AS is an operating company and also the holding company for CEMEX's operations in Finland, Norway and Sweden.
- (15) Represents CHP's direct and indirect equity interest.
- (16) Represents outstanding shares of CEMEX Latam's capital stock and excludes treasury stock.
- (17) Represents CEMEX Latam's indirect interest.
- (18) Represents CEMEX Latam's 99.483% indirect interest in ordinary shares, and excludes: (i) a 0.515% interest held in Cemento Bayano, S.A.'s treasury, and (ii) a 0.002% interest held by third parties.
- (19) Represents CEMEX Latam's direct and indirect interest in five companies incorporated in Guatemala, CEMEX Guatemala, S.A. ("CEMEX Guatemala"), Global Concrete, S.A., Gestión Integral de Proyectos, S.A., Equipos para uso de Guatemala, S.A., and Cementos de Centroamérica, S.A.
- (20) Represents CEMEX Latam's 99.75% and 98.94% indirect interest in ordinary and preferred shares, respectively.
- (21) Represents CEMEX Colombia's indirect interest.
- (22) Includes CEMEX (Costa Rica), S.A.'s 98% interest and CEMEX Colombia's 2% indirect interest.

#### Mexico

Overview. For the year ended December 31, 2016, our operations in Mexico represented approximately 20% of our net sales in Mexican Peso terms before eliminations resulting from consolidation. As of December 31, 2016, our business in Mexico represented approximately 32% of our total installed cement capacity and approximately 12% of our total assets.

As of December 31, 2016, CEMEX México, a direct subsidiary of CEMEX, S.A.B. de C.V., was both a holding company for some of our operating companies in Mexico and an operating company involved in the manufacturing and distribution of cement, aggregates, steel, ground stone and other construction materials and cement by-products in Mexico. CEMEX México, indirectly, is also the holding company for substantially all our international operations. CEMEX México, together with its subsidiaries, accounts for a substantial part of the revenues and operating income of our operations in Mexico.

Our Tepeaca cement plant in Puebla, Mexico currently has a production capacity of approximately 3.4 million tons of cement per year. In December 2014, we announced the restart of the Tepeaca cement plant expansion, consisting in the construction of a new kiln, so that its total production capacity reaches approximately 7.5 million tons of cement per year by 2018. As of December 31, 2016, we were monitoring the market for the best timing to expand the Tepeaca cement plant without disrupting the market. Other options that require less investment and could provide additional capacity in the same region are also available. For example, debottlenecking approximately U.S.\$8 million in Huichapan could represent approximately 0.5 million tons of cement supplying essentially the same market.

In 2001, we launched the Construrama program, a registered brand name for construction material stores. Through the Construrama program, we offer to an exclusive group of our Mexican distributors the opportunity to sell a variety of products under the Construrama brand name, a concept that includes the standardization of stores, image, marketing, products and services. As of December 31, 2016, approximately 677 independent concessionaries with more than 1,612 stores were integrated into the Construrama program, with nationwide coverage.

*Industry*. For 2016, the National Institute of Statistics and Geography (*Instituto Nacional de Estadística y Geografía*) indicated that total construction activity in Mexico expanded by 1.8% up to December (seasonally adjusted figures). This performance has been attributed mainly to an increase in industrial and commercial activity, which has offset a steep decline in infrastructure activity.

Cement in Mexico is sold principally through distributors, with the remaining balance sold through ready-mix concrete producers, manufacturers of pre-cast concrete products and construction contractors. Cement sold through distributors is mixed with aggregates and water by the end user at the construction site to form concrete. Ready-mix concrete producers mix the ingredients in plants and deliver it to local construction sites in mixer trucks, which pour the concrete. Unlike more developed economies, where purchases of cement are concentrated in the commercial and industrial sectors, retail sales of cement through distributors in 2016 accounted for approximately 61% of Mexico's demand (bagged presentation). Individuals who purchase bags of cement for self-construction and other basic construction needs are a significant component of the retail sector. We believe that this large retail sales base is a factor that significantly contributes to the overall performance of the Mexican cement market.

The retail nature of the Mexican cement market also enables us to foster brand loyalty, which distinguishes us from other worldwide producers selling primarily in bulk. We own the registered trademarks for our brands in Mexico, such as "Tolteca," "Monterrey," "Maya," "Anáhuac," "Campana," "Gallo," "Centenario," "Impercem" and "Tolteca Extra," "Monterrey Extra," "Maya Extra," "Anáhuac Extra," "Campana Extra," "Gallo Extra," "Centenario Extra," and "Multiplast." We believe that these brand names are important in Mexico since cement is principally sold in bags to retail customers who may develop brand loyalty based on differences in quality and service. In addition, we own the registered trademark for the "Construrama" brand name for construction material stores.

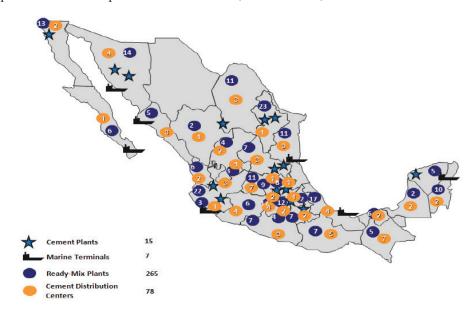
Competition. In the early 1970s, the cement industry in Mexico was regionally fragmented. However, for over more than the past 45 years, cement producers in Mexico have increased their production capacity and the Mexican cement industry has consolidated into a national market, thus becoming increasingly competitive. The major cement producers in Mexico are CEMEX; LafargeHolcim; Sociedad Cooperativa Cruz Azul, a Mexican operator; Cementos Moctezuma, an associate of Ciments Molins; and GCC, a Mexican operator in which we hold a 9.47% direct interest and in whose majority holder, CAMCEM, we hold a minority interest. During 2013, a new cement producer, Elementia (Cementos Fortaleza), entered the market and in 2014 merged with Lafarge (prior to the Lafarge-Holcim merger) within the Mexican market. The major ready-mix concrete producers in Mexico are CEMEX, LafargeHolcim, Sociedad Cooperativa Cruz Azul and Cementos Moctezuma. In addition, the use of non-integrated ready-mixers has been increasing.

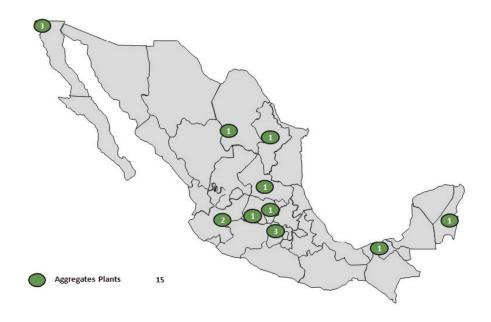
Potential entrants into the Mexican cement market face various impediments to entry, including, among other things, the time-consuming and expensive process of establishing a retail distribution network and developing the brand identification necessary to succeed in the retail market; the lack of port infrastructure and the high inland transportation costs resulting from the low value-to-weight ratio of cement; the distance from ports to major consumption centers and the presence of significant natural barriers, such as mountain ranges, which border Mexico's east and west coasts; the strong brand recognition and the wide variety of special products with enhanced properties; the extensive capital expenditure requirements; and the length of time required for construction of new plants, which is approximately two years.

## Our Operating Network in Mexico

During 2016, we operated 13 out of our total of 15 cement plants (two were temporarily shut down given market conditions) and 85 cement distribution centers (including seven marine terminals) located throughout Mexico.

We operate modern cement plants on the Gulf of Mexico and Pacific coasts, allowing us to take advantage of low transportation costs to export to the United States, the Caribbean, and Central and South America.





#### **Products and Distribution Channels**

Cement. For the year ended December 31, 2016, our cement operations represented approximately 57% of net sales for our operations in Mexico before eliminations resulting from consolidation in Mexican Peso terms and our domestic cement sales volume represented approximately 97% of our total cement sales volume in Mexico. As a result of the retail nature of the Mexican market, our operations in Mexico are not dependent on a limited number of large customers. The total volume (bagged) of the five most important distributors accounted for approximately 11% of our total cement sales by volume in Mexico in 2016 (excluding our in-house channels).

Ready-Mix Concrete. For the year ended December 31, 2016, our ready-mix concrete operations represented approximately 21% of net sales for our operations in Mexico before eliminations resulting from consolidation in Mexican Peso terms. Our ready-mix concrete operations in Mexico purchase all their cement requirements from our cement operations in Mexico. Ready-mix concrete is sold through our own internal sales force and facilities network.

Aggregates. For the year ended December 31, 2016, our aggregates operations represented approximately 5% of net sales for our operations in Mexico before eliminations resulting from consolidation in Mexican Peso terms.

Exports. Our operations in Mexico export a portion of their cement production, mainly in the form of cement and to a lesser extent in the form of clinker. Exports of cement by our operations in Mexico represented approximately 3% of our total cement sales volume in Mexico for 2016. In 2016, approximately 46% of our cement exports from Mexico were to the United States, 42% to Central America and the Caribbean and 12% to South America.

The cement and clinker exports by our operations in Mexico to the United States are mostly marketed through subsidiaries of CEMEX Corp., the holding company of CEMEX, Inc. All transactions between CEMEX and the subsidiaries of CEMEX Corp., which act as our U.S. importers, are conducted on an arm's-length basis.

*Production Costs.* Our cement plants in Mexico primarily utilize pet coke and alternative fuels. We have entered into four 20-year agreements with Petróleos Mexicanos ("PEMEX") pursuant to which PEMEX has

agreed to supply us with pet coke, including Termoeléctrica del Golfo's ("TEG") coke consumption, through 2024. In 2016, PEMEX supplied us with approximately a total of 1.1 million tons of pet coke. Pet coke is petroleum coke, a solid or fixed carbon substance that remains after the distillation of hydrocarbons in petroleum and that may be used as fuel in the production of cement. The PEMEX pet coke contracts have reduced the volatility of our fuel costs. In addition, in 1992, our operations in Mexico began using alternative fuels to further reduce the consumption of residual fuel oil and natural gas. These alternative fuels represented approximately 14% of the total fuel consumption for our operations in Mexico in 2016. For additional information, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Commercial Commitments."

In 1999, we entered into an agreement with an international partnership, which financed, built and operated TEG, a 230 megawatt ("MW") energy plant in Tamuín, San Luis Potosí, Mexico. We entered into this agreement in order to reduce the volatility of our energy costs. The total cost of the project was approximately U.S.\$360 million. The power plant commenced commercial operations in April 2004. In 2007, the original operator was replaced and the contract was extended to 2027. For additional information, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Commercial Commitments."

In 2006, in order to take advantage of the high wind potential in the "Tehuantepec Isthmus," CEMEX and the Spanish company ACCIONA, S.A. ("ACCIONA"), formed an alliance to develop a wind farm project for the generation of 250 MW in the Mexican state of Oaxaca. The installation of 167 wind turbines in the farm was finished on November 15, 2009. For additional information, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Commercial Commitments."

In connection with the beginning of full commercial operations of the Ventika S.A.P.I. de C.V. and the Ventika II S.A.P.I. de C.V. wind farms (jointly "Ventikas") located in the Mexican state of Nuevo Leon with a combined generation capacity of 252 MW, we agreed to acquire a portion of the energy generated by Ventikas for our Mexican plants for a period of 20 years, which began in April 2016. During 2016, Ventikas supplied approximately 6.4% (unaudited) of CEMEX's overall electricity needs in Mexico. This agreement is for CEMEX's own use and CEMEX does not intend to engage in energy trading.

We have, from time to time, purchased hedges from third parties to reduce the effect of volatility in energy prices in Mexico. See "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Commercial Commitments." Additionally, in 2015, we created CEMEX Energía, an energy division seeking to develop a portfolio of power projects in Mexico.

Description of Properties, Plants and Equipment. As of December 31, 2016, we had 15 wholly-owned cement plants and proportional interests through associates in three other cement plants located throughout Mexico, with a total potential capacity of 30 million tons per year, of which two were temporarily shut down given market conditions. We have exclusive access to limestone quarries and clay reserves near each of our plant sites in Mexico. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves of our operations in Mexico had an average remaining life of approximately 138 and 88 years, respectively, assuming 2012-2016 average annual cement production levels. As of December 31, 2016, all our production plants in Mexico utilized the dry process.

As of December 31, 2016, we had a network of 78 land distribution centers in Mexico, which are supplied through a fleet of our own trucks and rail cars, as well as leased trucks and rail facilities, and operated seven marine terminals. In addition, we had 265 (58 are idle due to market conditions) ready-mix concrete plants throughout 77 cities in Mexico, more than 2,301 ready-mix concrete delivery trucks and 15 aggregates quarries.

Capital Expenditures. We made capital expenditures of approximately U.S.\$79 million in 2014, U.S.\$68 million in 2015 and U.S. \$84 million in 2016 in our operations in Mexico. We currently expect to make capital expenditures of over U.S.\$123 million in our operations in Mexico during 2017.

#### **United States**

Overview. For the year ended December 31, 2016, our operations in the United States represented approximately 26% of our net sales in Mexican Peso terms before eliminations resulting from consolidation. As of December 31, 2016, our business in the United States represented approximately 18% of our total installed cement capacity and approximately 48% of our total assets. As of December 31, 2016, CEMEX, Inc. was the main holding company of our operating subsidiaries in the United States.

As of December 31, 2016, we had a cement manufacturing capacity of approximately 16.6 million tons per year in our operations in the United States, including 1.3 million tons in proportional interests through non-controlling holdings. As of December 31, 2016, we operated a geographically diverse base of 12 cement plants located in Alabama, California, Colorado, Florida, Georgia, Kentucky, Louisiana, Ohio, Pennsylvania, Tennessee and Texas. As of that date, we also operated 45 rail, truck or water served active cement distribution terminals in the United States. As of December 31, 2016, we had 345 ready-mix concrete plants located in Alabama, Arizona, California, Florida, Georgia, Louisiana, Nevada, Oregon, Tennessee, Texas and Washington and aggregates facilities in Arizona, California, Florida, Georgia, Nevada, Oregon, Texas and Washington.

On September 23, 2013, we and Concrete Supply Company, a leading producer of ready-mix concrete throughout the Carolinas, entered into a joint venture agreement and formed a joint venture company named Concrete Supply Co., LLC, which is majority owned by Concrete Supply Holdings Co, who acts as the managing member. This joint venture is a leading concrete supplier in North and South Carolina with strong local management.

In February 2015 we completed an asset swap with Vulcan Materials Company, under which CEMEX exchanged its asphalt plants in Arizona and Sacramento for 12 ready-mix concrete plants in California. Under the agreement, CEMEX will continue supplying aggregates to the exchanged asphalt plants. Also, CEMEX will be able to capture incremental cement sales to the acquired ready-mix concrete plants. Given the operations and strategic focus in these markets, we expect each party should earn a higher return on the exchanged assets and continue serving its customers efficiently. This swap was a cash-free transaction.

On September 12, 2016, one of our subsidiaries in the U.S. signed a definitive agreement for the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle Materials Inc. for U.S.\$400 million. The proceeds obtained from this transaction were used mainly for debt reduction and for general corporate purposes. This transaction closed on February 10, 2017.

On November 18, 2016, after all conditions precedent were satisfied, CEMEX, S.A.B. de C.V. announced that it had closed the sale of certain assets in the U.S. to GCC for approximately U.S.\$306 million. The assets were sold by an affiliate of CEMEX to an affiliate of GCC in the U.S., and mainly consisted of CEMEX's cement plant in Odessa, Texas, two cement terminals and the building materials business in El Paso, Texas and Las Cruces, New Mexico.

On January 31, 2017, one of CEMEX, S.A.B. de C.V.'s subsidiaries in the U.S. closed the sale of the Concrete Pipe Business to Quikrete for U.S.\$500 million plus an additional U.S.\$40 million purchase price contingent on future performance.

On April 17, 2017, CEMEX, S.A.B. de C.V. announced that one of its subsidiaries in the U.S. had entered into a definitive agreement for the sale of Pacific Northwest to Cadman Materials, a LehighHanson company and U.S. subsidiary of HeidelbergCement Group, for U.S.\$150 million. Pacific Northwest consists of aggregates,

asphalt and ready-mix concrete operations in Oregon and Washington. Pending satisfaction of certain conditions, including regulatory approvals, the proceeds obtained from this sale will be used mainly for debt reduction and general corporate purposes.

Industry. Demand for cement is derived from the demand for ready-mix concrete and concrete products which, in turn, is dependent on the demand for construction. The construction industry is composed of three major sectors: the residential, the industrial and commercial, and the public sectors. The public sector is the most cement intensive sector, particularly for infrastructure projects such as streets, highways and bridges. While overall cement demand is sensitive to the business cycle, the public sector demand is more stable and also has helped to soften the decline in global demand during periodic economic recessions.

The construction industry is continuing to recover from the recession experienced during 2008 and 2009, which was the worst downturn in over 70 years. The construction industry was hit particularly hard during this recession due to the collapse of the housing sector. Housing starts fell 73% from a peak of 2.1 million units in 2005 to only 554,000 units in 2009. The decline in housing and other construction activity resulted in a 45% decline in cement demand from 2005 to 2010. The economic recovery has proceeded at a relatively moderate pace, with real gross domestic product average annual growth of 2.1% since 2010. With the economy growing again, the construction sector stabilized in 2010 and joined the economy-wide recovery in 2011. The excess vacant inventory in the housing sector has largely been absorbed and inventories have declined to below normal levels in most markets, which together have supported an increase in housing prices over the last three years of about 19%. Housing starts have increased by approximately 110% from 0.554 million units in 2009 to 1.16 million units in 2016. Housing starts in 2016 increased by 5% to 1.16 million units which remains well below the historical steady state level. The industrial and commercial sector has also been growing with nominal spending up 78% from 2012 to 2016. Industrial & commercial nominal spending increased by 10.3% in 2016. The public sector, which has lagged the other construction sectors in this recovery, remained positive in 2016 with spending up approximately 1%. Cement demand has been increasing annually since 2012 with cement demand up an estimated 2.5% in 2016 after an increase of 17% from 2012 to 2015. The Portland Cement Association is forecasting a 3% increase in cement demand for 2017.

*Competition*. The cement industry in the United States is highly competitive, including national and regional cement producers in the United States. Our principal competitors in the United States are LafargeHolcim, Buzzi-Unicem, Heidelberg and Ash Grove Cement.

The independent U.S. ready-mix concrete industry is highly fragmented. According to the National Ready Mixed Concrete Association ("NRMCA"), it is estimated that there are about 5,500 ready-mix concrete plants that produce ready-mix concrete in the United States and about 55,000 ready-mix concrete mixer trucks that deliver the concrete to the point of placement. The NRMCA estimates that the value of ready-mix concrete produced by the industry is approximately U.S.\$35 billion per year. Given that the concrete industry has historically consumed approximately 75% of all cement produced annually in the United States, many cement companies choose to develop concrete plant capabilities.

Aggregates are widely used throughout the United States for all types of construction because they are the most basic materials for building activity. The U.S. Geological Survey ("USGS") estimates over 2.3 billion tons of aggregates were produced in 2016, an increase of about 4% over 2015. Crushed stone accounted for 58% of aggregates consumed, sand & gravel 41%, and slag 1%. These products are produced in all 50 states and have a value of U.S.\$21.6 billion. The U.S. aggregates industry is highly fragmented and geographically dispersed. The top ten producing states represent approximately 50% of all production. According to the USGS, during 2016, an estimated 4,100 companies operated approximately 6,300 sand and gravel sites and 1,430 companies operated 3,700 crushed stone quarries and 82 underground mines in the 50 U.S. states.

# Our Operating Network in the United States

The maps below reflect the location of our operating assets, including our cement plants and cement terminals in the United States as of December 31, 2016.



### **Products and Distribution Channels**

Cement. For the year ended December 31, 2016, our cement operations represented approximately 32% of our operations in the United States' net sales before eliminations resulting from consolidation in Mexican Peso terms. We deliver a substantial portion of cement by rail, which occasionally those go directly to customers. Otherwise, shipments go to distribution terminals where customers pick up the product by truck or we deliver the product by truck. The majority of our cement sales are made directly to users of gray portland and masonry cements, generally within a radius of approximately 200 miles of each plant.

Ready-Mix Concrete. For the year ended December 31, 2016, our ready-mix concrete operations represented approximately 41% of our operations in the United States' net sales before eliminations resulting from consolidation in Mexican Peso terms. Our ready-mix concrete operations in the United States purchase most of their cement aggregates requirements from our cement operations in the United States. Our ready-mix concrete products are mainly sold to residential, commercial and public contractors and to building companies.

Aggregates. For the year ended December 31, 2016, our aggregates operations represented approximately 17% of our operations in the United States' net sales before eliminations resulting from consolidation in Mexican Peso terms. We estimate that, as of December 31, 2016, the crushed stone quarries and sand/gravel pits permitted proven and probable reserves of our operations in the United States had an average remaining life of approximately 29 years, assuming 2012-2016 average annual aggregates production levels. Our aggregates are consumed mainly by our internal operations and by our trade customers in the ready-mix, concrete products and asphalt industries.

Production Costs. The largest cost components of our plants are electricity and fuel, which accounted for approximately 25% of our total production costs of our cement operations in the United States in 2016. We are currently implementing a program to gradually replace coal with more economic fuels, such as pet coke, tires and other alternative fuels, which has resulted in reduced energy costs. By retrofitting our cement plants to handle alternative energy fuels, we have gained more flexibility in supplying our energy needs and have become less vulnerable to potential price spikes. In 2016, the increased use of alternative fuels helped to offset the effect on our fuel costs of increasing coal prices. Power costs in 2016 represented approximately 11% of our cash manufacturing cost of our cement operations in the United States, which represents production cost before depreciation. We have improved the efficiency of our electricity usage of our cement operations in the United States, concentrating our manufacturing activities in off-peak hours and negotiating lower rates with electricity suppliers.

Description of Properties, Plants and Equipment. As of December 31, 2016, we operated 12 cement manufacturing plants in the United States, and had a total installed capacity of 16.6 million tons per year including 1.3 million tons representing our proportional interests through associates in six other cement plants. We estimate that, as of December 31, 2016, the limestone permitted proven and probable reserves of our operations in the United States had an average remaining life of approximately 51 years, assuming 2012-2016 average annual cement production levels. As of that date, we operated a distribution network of 45 cement terminals. All of our 12 cement production facilities in 2016 were wholly-owned except for the Louisville, Kentucky plant, which is owned by Kosmos Cement Company, a joint venture in which we own a 75% interest and a subsidiary of Dyckerhoff AG (a subsidiary of Buzzi-Unicem) owns a 25% interest. As of December 31, 2016, we had 345 wholly-owned ready-mix concrete plants and operated 57 aggregates quarries. As of December 31, 2016, we distributed fly ash through eight terminals and three third-party-owned utility plants, which operate both as sources of fly ash and distribution terminals. As of that date, we also owned 43 concrete block, paver, precast, and asphalt facilities.

We have continued to take a number of actions to streamline our operations and improve productivity, including temporary capacity adjustments and rationalizations in some of our cement plants, and shutdowns of ready-mix and block plants and aggregates quarries. We are currently utilizing approximately 79% of our ready-mix plants, 63% of our block manufacturing plants and 78% of our aggregates quarries in the United States.

Capital Expenditures. We made capital expenditures of approximately U.S.\$202 million in 2014, U.S.\$216 million in 2015 and U.S.\$197 million in 2016 in our operations in the United States. We currently expect to make capital expenditures of approximately U.S.\$192 million in our operations in the United States during 2017.

#### Europe

For the year ended December 31, 2016, our business in Europe, which includes our operations in the United Kingdom, France, Germany, Spain and the Rest of Europe, as described below, represented approximately 23% of our net sales before eliminations resulting from consolidation. As of December 31, 2016, our business in Europe represented approximately 26% of our total installed capacity and approximately 17% of our total assets.

# Our Operations in the United Kingdom

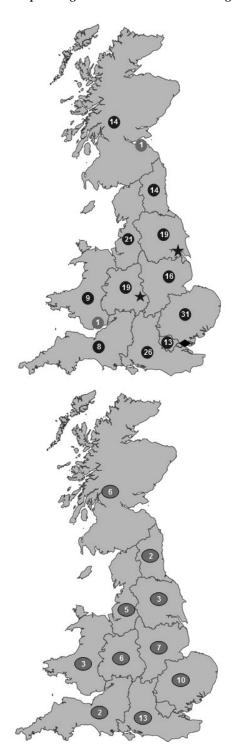
*Overview*. For the year ended December 31, 2016, our operations in the United Kingdom represented approximately 8% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in the United Kingdom represented approximately 5% of our total assets.

As of December 31, 2016, CEMEX Investments Limited was the main holding company of our operating subsidiaries in the United Kingdom. We are a leading provider of building materials in the United Kingdom with vertically integrated cement, ready-mix concrete, aggregates and asphalt operations. We are also an important provider of concrete and precast materials solutions such as concrete blocks, concrete block paving, flooring systems and sleepers for rail infrastructure.

Industry. According to the United Kingdom's Construction Products Association, in 2016, the gross domestic product of the United Kingdom was estimated to have grown by 2.0% compared to 2.2% growth in 2015. Total construction output is estimated to have increased by 1.6% in 2016, as compared to a 4.9% increase in 2015 over the preceding year. Whilst public housing fell by 8.0%, the private housing sector is estimated to have grown by 10.0% in 2016, with the private housing market continuing to be stimulated by the government's Help to Buy scheme. Public non-housing sector is estimated to have increased by 2.9% in 2016. The industrial sector fell by 7.3%, affected by lower investment in new factories and warehouses. In 2016, the commercial sector increased by 5.4%, boosted by investment in offices and entertainment. The infrastructure sector fell by 4% driven by lower investment in roads, rail, gas, air and communications. As of April 26, 2017, the official data corresponding to 2016 has not been released by the Mineral Products Association, but we estimate that domestic cement demand expanded by approximately 2% in 2016 compared to 2015.

Competition. Our primary competitors in the United Kingdom are: Tarmac (now owned by CRH after divestments by Lafarge and Holcim during their merger), Hanson (a subsidiary of HeidelbergCement), Aggregate Industries (a subsidiary of LafargeHolcim) and Breedon Group, formerly Breedon Aggregates, which acquired Hope Construction Materials (owned by Mittal Investments and formed three years ago from enforced divestments by Lafarge and Tarmac when they created Lafarge Tarmac). The Lafarge Tarmac business was divested to CRH (except for two cement plants to be retained by LafargeHolcim). In addition, an estimated 2.6 million tons of cement were imported to the United Kingdom by various players including CRH, LafargeHolcim, HeidelbergCement and other independents, with material increasingly arriving from overcapacity markets including Ireland, Spain and Greece.

# Our Operating Network in the United Kingdom



*	Cement plants 2
•	Grinding Mill 1
0	Ready-Mix plants 190
0	Cement terminals 2

Aggregates Sites 57

#### **Products and Distribution Channels**

Cement. For the year ended December 31, 2016, our cement operations represented approximately 18% of net sales for our operations in the United Kingdom before eliminations resulting from consolidation in Mexican Peso terms. About 81% of our United Kingdom cement sales were of bulk cement, with the remaining 19% in bags. Our bulk cement is mainly sold to ready-mix concrete, concrete block and pre-cast product customers and contractors. Our bagged cement is primarily sold to national builders' merchants.

Ready-Mix Concrete. For the year ended December 31, 2016, our ready-mix concrete operations represented approximately 27% of net sales for our operations in the United Kingdom before eliminations resulting from consolidation in Mexican Peso terms. Special products, including self-compacting concrete, fiber-reinforced concrete, high strength concrete, flooring concrete and filling concrete, represented 26% of our 2016 United Kingdom sales volume. In 2016, our ready-mix concrete operations in the United Kingdom purchased approximately 90% of its cement requirements from our cement operations in the United Kingdom and approximately 84% of its aggregates requirements from our aggregates operations in the United Kingdom. Our ready-mix concrete products are mainly sold to public, commercial and residential contractors.

Aggregates. For the year ended December 2016, our aggregates operations represented approximately 28% of net sales for our operations in the United Kingdom before eliminations resulting from consolidation in Mexican Peso terms. In 2016, our United Kingdom aggregates sales were divided as follows: 46% were sand and gravel, 47% limestone and 7% hard stone. In 2016, 16% of our aggregates volumes were obtained from marine sources along the United Kingdom coast. In 2016, approximately 39% of our United Kingdom aggregates production was consumed by our own ready-mix concrete operations as well as our asphalt, concrete block and precast operations. We also sell aggregates to major contractors to build roads and other infrastructure projects.

#### **Production Costs**

Cement. In 2016, fixed production costs decreased by 9% driven by extending our major kiln overhaul schedule from 12 to 18 months. Variable costs decreased by 16%, primarily as a result of benefits from the electricity cost (income from the UK government to compensate the cement sector for the indirect costs imposed to subsidize the generation of renewable energy, which have been added to electricity prices in the UK) and improved fuel and additives costs. We continued to implement our cost reduction programs through our use of alternative fuels. In March 2015, our partner Suez opened its Malpass factory, adjacent to our Rugby plant, to supply us with Refuse Derived Fuels.

*Ready-Mix Concrete.* In 2016, fixed production costs increased by 4%, as compared to fixed production costs in 2015, due to annual increases in wages, salaries and services.

Aggregates. In 2016, fixed production costs remained flat as compared to 2015 fixed production costs.

Description of Properties, Plants and Equipment. As of December 31, 2016, we operated two cement plants, and one clinker grinding facility in the United Kingdom. Assets in operation at year-end 2016 represent an installed cement capacity of 2.4 million tons per year. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves of our operations in the United Kingdom had an average remaining life of approximately 79 and 53 years, respectively, assuming 2012-2016 average annual cement production levels. As of December 31, 2016, we also owned two cement import terminals and operated 190 ready-mix fixed concrete plants and 57 aggregates quarries in the United Kingdom, in addition, we had operating units dedicated to the asphalt, concrete blocks, concrete block paving, sleepers and flooring businesses in the United Kingdom.

In order to ensure increased availability of blended cements, which are more sustainable based on their reduced clinker factor and use of by-products from other industries, our grinding and blending facility at the Port

of Tilbury, located on the Thames River east of London has an annual grinding capacity of approximately 1.2 million tons, which ensures availability of blended cements. Blended cements are more sustainable based on their reduced clinker factor and use of by-products from other industries.

Capital Expenditures. We made capital expenditures of approximately U.S.\$45 million in 2014, U.S.\$57 million in 2015 and U.S.\$30 million in 2016 in our operations in the United Kingdom. We currently expect to make capital expenditures of approximately U.S.\$39 million in our operations in the United Kingdom during 2017.

#### Our Operations in France

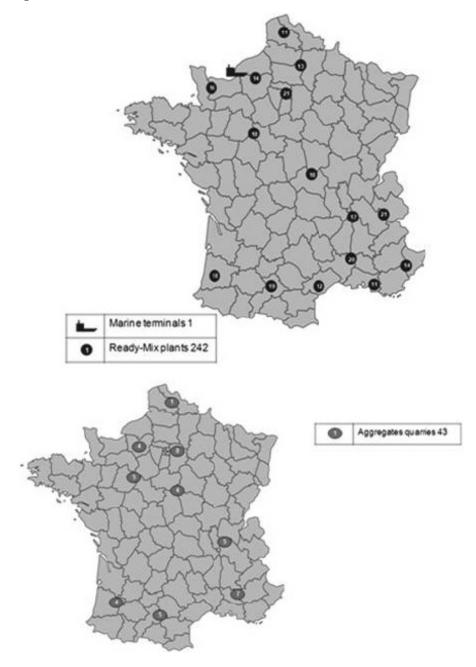
Overview. As of December 31, 2016, CEMEX France was our main subsidiary in France. We are a leading ready-mix concrete producer and a leading aggregates producer in France. We distribute the majority of our materials by road and a significant quantity by waterways, seeking to maximize the use of this efficient and sustainable alternative. For the year ended December 31, 2016, our operations in France represented approximately 5% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in France represented approximately 3% of our total assets.

*Industry*. According to the French Building Association, housing starts in the residential sector increased by 10% in 2016 compared to 2015. Non-residential buildings starts increased by 6% in 2016 compared to 2015 and demand from the public works sector increased by approximately 3.5% over the same period.

According to the Building Materials Association, total ready-mix concrete consumption in France in 2016 reached approximately 36.8 million of cubic meters, a 3% increase compared to 2015, and total aggregates production amounted to approximately 319 million tons, a 1% increase compared to 2015.

Competition. Our main competitors in the ready-mix concrete market in France include LafargeHolcim, Italcementi and Vicat. Our main competitors in the aggregates market in France include LafargeHolcim, Italcementi, Colas (Bouygues) and Eurovia (Vinci). Many of our major competitors in ready-mix concrete are subsidiaries of French cement producers, whereas we rely on sourcing cement from third parties.

# Our Operating Network in France



Description of Properties, Plants and Equipment. As of December 31, 2016, we operated 242 ready-mix concrete plants in France, one maritime cement terminal located in Le Havre, on the northern coast of France, 21 land distribution centers, 43 quarries and ten river ports.

Capital Expenditures. We made capital expenditures of approximately U.S.\$27 million in 2014, U.S.\$32 million in 2015 and U.S. \$19 million in 2016 in our operations in France. We currently expect to make capital expenditures of approximately U.S.\$20 million in our operations in France during 2017.

### Our Operations in Germany

Overview. For the year ended December 31, 2016, our operations in Germany represented approximately 4% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in Germany represented approximately 1% of our total assets. As of December 31, 2016, CEMEX Deutschland AG was our main subsidiary in Germany. We are a leading provider of building materials in Germany, with vertically integrated cement, ready-mix concrete and aggregates businesses.

On January 5, 2015, we closed a series of transactions with Holcim, pursuant to which, we sold to Holcim assets in the western region of Germany consisting of one cement plant, two cement grinding mills, one slag granulator, 22 aggregates quarries and 79 ready-mix plants, while we maintained our operations in the north, east and south of Germany.

*Industry*. According to EUROCONSTRUCT Institute, the total construction output in Germany increased by 2.5% in 2016, compared to 2015. The main driver of such increase was the non-residential sector. According to the German Cement Association, in 2016, the national cement consumption in Germany increased by 3.5% to 27.5 million tons, while the ready-mix concrete market and the aggregates market each increased by approximately 2%.

Competition. Our primary competitors in the cement market in Germany are Heidelberg, Dyckerhoff (a subsidiary of Buzzi-Unicem), LafargeHolcim, CRH and Schwenk, a local German competitor. These competitors, along with CEMEX, represent a market share of about 85%, as estimated by us for 2016. The ready-mix concrete and aggregates markets in Germany are fragmented and regionally heterogeneous, with many local competitors. The consolidation process in the ready-mix concrete and aggregates markets is moderate.

#### Our Operating Network in Germany





Description of Properties, Plants and Equipment. As of December 31, 2016, we operated one cement plant in Germany and our installed cement capacity was 2.4 million tons per year. We estimate that, as of December 31, 2016, the limestone permitted proven and probable reserves of our operations in Germany had an average remaining life up to 38 years, assuming 2012-2016 average annual cement production levels. As of that date, our operations in Germany included one cement grinding mill, 82 ready-mix concrete plants, 21 aggregates quarries, two land distribution centers for cement and two maritime terminals.

Capital Expenditures. We made capital expenditures of approximately U.S.\$29 million in 2014, U.S.\$22 million in 2015 and U.S.\$26 million in 2016 in our operations in Germany. We currently expect to make capital expenditures of approximately U.S.\$13 million in our operations in Germany during 2017.

### Our Operations in Spain

*Overview*. As of December 31, 2016, we held approximately 99.9% of CEMEX España (including shares held in treasury), a holding company for most of our international operations. For the year ended December 31, 2016, our operations in Spain represented approximately 2% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our business in Spain represented approximately 5% of our total assets.

On January 5, 2015, we closed a series of transactions with Holcim, pursuant to which we acquired from Holcim the Gador cement plant (with an annual installed cement production capacity of approximately 0.97 million tons, which production capacity was recently reassessed after managing and operating the plant in the first quarter of 2015) and the Yeles cement grinding station (with an annual installed cement production capacity of 0.90 million tons).

On October 1, 2012, CEMEX España agreed to spin-off its Spanish industrial operations in favor of CEMEX España Operaciones, S.L.U. ("CEMEX España Operaciones"), a subsidiary in which CEMEX España holds 100% of the share capital.

In December 2012, the merger of CEMEX España Operaciones and Aricemex, S.A. and Hormicemex, S.A. was completed and, as a result, our manufacturing and sales of cement, aggregates, concrete and mortar were consolidated in CEMEX España Operaciones, which became our Spanish operating subsidiary.

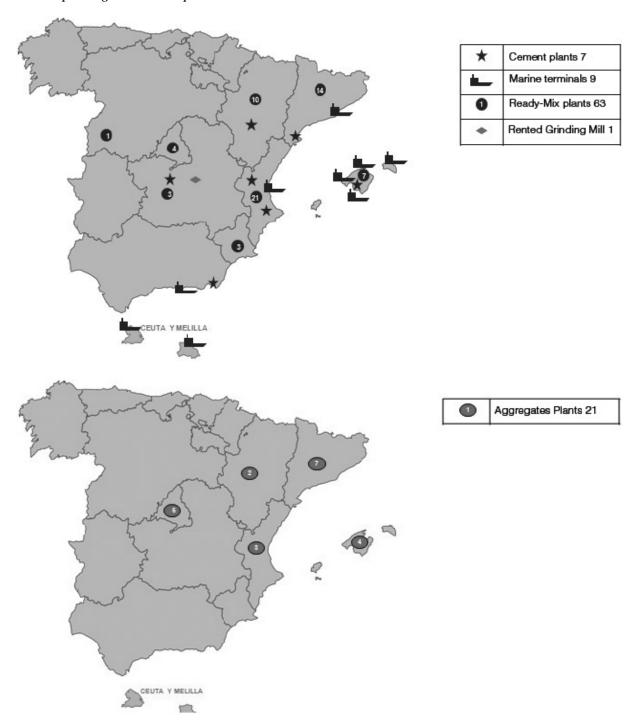
Industry. In 2016, the investment in the construction sector in Spain is estimated to have increased by 2.1% compared to 2015, primarily driven by the investment in the residential construction sector, which is estimated to have increased by 3.8% in 2016. According to the latest estimates from the Spanish Cement Producers Association (Agrupación de Fabricantes de Cemento de España) ("OFICEMEN"), cement consumption in Spain decreased by 3.2% in 2016 compared to 2015.

According to OFICEMEN, cement imports decreased 21.3% in 2013, increased 14.8% in 2014, increased 15.1% in 2015 and decreased 11.6% in 2016. Clinker imports have declined 75% in 2012, 26% in 2013, 2.4% in 2014, 50.4% in 2015 and 86.1% in 2016.

In the early 1980s, Spain was one of the leading exporters of cement in the world, exporting up to 13 million tons per year. However, as of December 31, 2016, cement exports amounted to approximately 4.1 million tons per year. In recent years, Spanish cement and clinker export volumes have fluctuated, reflecting the rapid changes in demand in the Mediterranean basin as well as the strength of the Euro and changes in the domestic market. According to OFICEMEN, these total export volumes increased 56% in 2012, 17.8% in 2013, 32.5% in 2014, decreased 4.1% in 2015, and increased 5.6% in 2016.

Competition. According to our estimates, as of December 31, 2016, we were one of the largest multinational producers of clinker and cement in Spain. Competition in the ready-mix concrete industry is intense in large urban areas. The overall high degree of competition in the Spanish ready-mix concrete industry is reflected in the multitude of offerings from a large number of concrete suppliers. We have focused on developing value added products and attempting to differentiate ourselves in the marketplace. The distribution of ready-mix concrete remains a key component of our business strategy in Spain.

# Our Operating Network in Spain



# **Products and Distribution Channels**

*Cement.* For the year ended December 31, 2016, our cement operations (including clinker) represented approximately 79% of net sales for our operations in Spain before eliminations resulting from consolidation in Mexican Peso terms. We offer various types of cement in Spain, targeting specific products to specific markets

and users. In 2016, approximately 21% of the domestic sales volume of CEMEX España Operaciones consisted of bagged cement, and the remainder of CEMEX España Operaciones's domestic sales volume consisted of bulk cement, primarily to ready-mix concrete operators, including sales to our other operations in Spain, as well as industrial customers that use cement in their production processes and construction companies.

Ready-Mix Concrete. For the year ended December 31, 2016, our ready-mix concrete operations represented approximately 12% of net sales for our operations in Spain before eliminations resulting from consolidation in Mexican Peso terms. Our ready-mix concrete operations in Spain in 2016 purchased almost 91% of their cement requirements from our cement operations in Spain, and approximately 45% of their aggregates requirements from our aggregates operations in Spain.

*Aggregates*. For the year ended December 31, 2016, our aggregates operations represented approximately 3% of net sales for our operations in Spain before eliminations resulting from consolidation in Mexican Peso terms.

Exports. Exports of cement and clinker by our operations in Spain, which represented approximately 32% of net sales for our operations in Spain before eliminations resulting from consolidation, decreased approximately 16% in 2016 compared to 2015, primarily as a result of a decrease in volume sold to the UK, Benin/Ivory Coast and Cameroon, offset slightly by higher sales to Algeria and the United States. Export prices are lower than domestic market prices, and costs are usually higher for export sales. Of our total exports from Spain in 2016, 28% consisted of white cement, 23% of gray portland cement and 48% of clinker. In 2016, 28% of our exports from Spain were to the United States and Central and South America, 19% to Europe and the Middle East and 53% to Africa.

*Production Costs.* We have improved the efficiency of our operations in Spain by introducing technological improvements that have significantly reduced our energy costs, including the use of alternative fuels, in accordance with our cost reduction efforts. In 2016, we used organic waste, tires and plastics as fuel, achieving a 37% substitution rate for pet coke in our gray and white clinker kilns for the year.

Description of Properties, Plants and Equipment. As of December 31, 2016, our operations in Spain included seven cement plants located in Spain, with an annual installed cement capacity of 10.4 million tons. As of that date, we also have 24 operative distribution centers, including 15 land and nine marine terminals, 63 ready-mix concrete plants, 21 aggregates quarries and 13 mortar plants. As of December 31, 2016, we owned nine limestone quarries located in close proximity to our cement plants and four clay quarries in our cement operations in Spain. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves of our operations in Spain had an average remaining life of approximately 82 and 23 years, respectively, assuming 2012-2016 average annual cement production levels.

Capital Expenditures. We made capital expenditures of approximately U.S.\$12 million in 2014, U.S.\$17 million in 2015 and U.S.\$25 million in 2016 in our operations in Spain. We currently expect to make capital expenditures of approximately U.S.\$13 million in our operations in Spain during 2017.

#### Rest of Europe

As of December 31, 2016, our operations in the Rest of Europe segment consisted primarily of our operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland, our other European assets and our approximately 38% non-controlling interest in a Lithuanian company. These operations represented approximately 4% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation, for the year ended December 31, 2016, and approximately 3% of our total assets as of December 31, 2016.

### Our Operations in Poland

*Overview*. As of December 31, 2016, CEMEX Polska Sp. Z.O.O. ("CEMEX Polska") was our main subsidiary in Poland. We are a leading provider of building materials in Poland, serving the cement, ready-mix concrete and aggregates markets. As of December 31, 2016, we operated two cement plants with an installed cement capacity of 3.0 million tons per year and one grinding mill in Poland. As of December 31, 2016, we also operated 41 ready-mix concrete plants, eight aggregates quarries and two maritime terminals in Poland.

*Industry*. According to our estimates, total cement consumption in Poland reached approximately 16.3 million tons in 2016, remaining flat compared to 2015.

*Competition.* Our primary competitors in the cement, ready-mix concrete and aggregates markets in Poland are Heidelberg, LafargeHolcim, CRH, Dyckerhoff and Miebach.

Capital Expenditures. We made capital expenditures of approximately U.S.\$13 million in 2014, U.S.\$12 million in 2015 and U.S.\$10 million in 2016 in our operations in Poland. We currently expect to make capital expenditures of approximately U.S.\$33 million in our operations in Poland during 2017.

### Our Operations in the Czech Republic

Overview. As of December 31, 2016, CEMEX Czech Republic, s.r.o. was our main subsidiary in the Czech Republic. We are a leading producer of ready-mix concrete and aggregates in the Czech Republic. We also distribute cement in the Czech Republic. As of December 31, 2016, we operated 74 ready-mix concrete plants, ten gravel pits and 19 aggregates quarries in the Czech Republic. As of that date, we also operated one cement plant with annual cement installed capacity of 1.0 million tons, one cement grinding mill and one cement terminal in the Czech Republic.

Industry. According to the Czech Statistical Office, total construction output in the Czech Republic decreased by approximately 8.5% in 2016. The decrease was primarily driven by a significant slowdown in infrastructure development. The main drivers behind the decrease in infrastructure development were an accelerated drawdown of EU funding in 2015 and a high number of large projects postponed due to non-compliance with Environmental Impact Assessment legislation in 2016. The civil engineering construction decrease is estimated at 17% and the building construction decrease at 4%. However, new construction in housing grew by almost 5% in 2016, and the building construction started to improve in the second half of the year. According to the Czech Cement Association, total cement consumption in the Czech Republic reached year-over-year growth of 3% in the first half 2016. Full year growth is estimated at a similar level. Specific full year data for 2016 will be provided by the Czech Cement Association in July 2017 due to limitations imposed by EU competition laws. In 2016, growth of total ready-mix concrete production in the Czech Republic is estimated to be 1.5%.

*Competition*. Our main competitors in the cement, ready-mix concrete and aggregates markets in the Czech Republic are Heidelberg, Buzzi, Skanska and LafargeHolcim.

Capital Expenditures. We made capital expenditures of approximately U.S.\$5 million in 2014, U.S.\$9 million in 2015 and U.S.\$7 million in 2016 in our operations in the Czech Republic. We currently expect to make capital expenditures of approximately U.S.\$7 million in our operations in the Czech Republic during 2017.

#### Our Operations in Latvia

Overview. As of December 31, 2016, CEMEX SIA was our operating subsidiary in Latvia. We are the only cement producer and a leading ready-mix concrete producer and supplier in Latvia. From our cement plant in

Latvia we also supply markets in Estonia, Lithuania, Finland, Sweden, northwest Russia, and Belarus. As of December 31, 2016, we operated one cement plant in Latvia with an installed cement capacity of 1.6 million tons per year. We also operated five ready-mix concrete plants and four aggregates quarries in Latvia. In 2016, we continued to develop in the road construction business by supplying Roller Compacted Concrete.

Capital Expenditures. In total, we made capital expenditures of approximately U.S.\$1 million in 2014, U.S.\$14 million in 2015 and U.S.\$7 million in 2016 in our operations in Latvia. We currently expect to make capital expenditures of approximately U.S.\$4 million in our operations in Latvia during 2017.

#### Our Equity Investment in Lithuania

*Overview*. As of December 31, 2016, we owned an interest of approximately 38% of Akmenés Cementas AB, a cement producer in Lithuania, which operates one cement plant in Lithuania with an annual installed cement capacity of 1.8 million tons.

### Sale of our Operations in Austria and Hungary

On October 31, 2015, after all conditions precedent were satisfied, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2015, a gain on sale of approximately U.S.\$45 million (Ps741 million). Such gain on sale includes the reclassification to the statement of operations of foreign currency translation effects accrued in equity until October 31, 2015 for an amount of approximately U.S.\$10 million (Ps215 million). See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

### Attempted Sale of our Operations in Southeast Europe

On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia.

The operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, for the years ended December 31, 2014, 2015 and 2016 included in our statements of operations were reclassified to the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

### Our Operations in Other European Countries

*Overview*. As of December 31, 2016, we operated ten marine cement terminals in Norway and Sweden through CEMEX AS, a leading bulk-cement importer in the Nordic region. As of December 31, 2016, we also operated three marine cement terminals in Finland.

Capital Expenditures. We made no significant capital expenditures in our operations in other European countries in 2014, 2015 and 2016. We currently do not expect to make any significant capital expenditures in our operations in other European countries during 2017.

#### South, Central America and the Caribbean

For the year ended December 31, 2016, our business in SAC, which includes our operations in the Colombia and Rest of SAC segments, as described below, represented approximately 12% of our net sales before eliminations resulting from consolidation. As of December 31, 2016, our business in SAC represented approximately 13% of our total installed capacity and approximately 8% of our total assets.

In November 2012, CEMEX Latam, a then wholly-owned subsidiary of CEMEX España, completed the sale of newly issued common shares in the CEMEX Latam Offering, representing approximately 26.65% of CEMEX Latam's outstanding common shares. CEMEX Latam is the main holding company for CEMEX's operations in Brazil, Colombia, Costa Rica, Guatemala, Nicaragua, Panama and El Salvador.

#### Our Operations in Colombia

Overview. As of December 31, 2016, we indirectly owned through CEMEX Latam approximately 99.7% of CEMEX Colombia, our main subsidiary in Colombia. As of December 31, 2016, CEMEX Colombia was the second-largest cement producer in Colombia, based on installed capacity of (4.0 million tons per year) as of December 31, 2016. For the year ended December 31, 2016, our operations in Colombia represented approximately 5% of our net sales before eliminations resulting from consolidation. As of December 31, 2016, our operations in Colombia represented 4% of our total assets.

CEMEX Colombia has a significant market share in the cement and ready-mix concrete market in the "Urban Triangle" of Colombia comprising the cities of Bogotá, Medellín and Cali. During 2016, these three metropolitan areas accounted for approximately 36.5% of Colombia's cement consumption. CEMEX Colombia's Ibague plant, which uses the dry process and is strategically located in the Urban Triangle, is CEMEX Colombia's largest plant and had an annual installed capacity of 2.8 million tons as of December 31, 2016. CEMEX Colombia, through its Bucaramanga and Cúcuta plants, is also an active participant in Colombia's northeastern market.

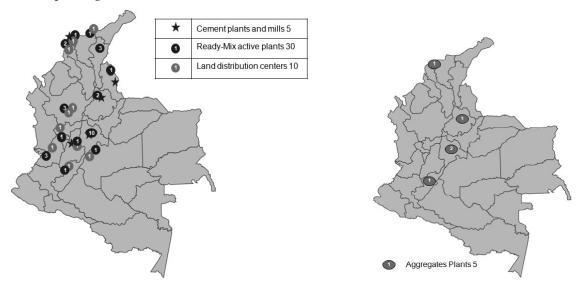
Industry. According our estimates, the installed capacity for cement in Colombia was 19.3 million tons in 2016. According to DANE, total cement consumption in Colombia reached 12.4 million tons during 2016, an decrease of 4.4% from 2015, while cement exports from Colombia reached 0.4 million tons. We estimate that close to 40% of cement in Colombia is consumed by the self-construction sector, while the infrastructure sector accounts for approximately 33% of total cement consumption and has been growing in recent years. The other construction segments in Colombia, including the formal housing and commercial sectors, account for the balance of cement consumption in Colombia.

*Competition*. We have two primary competitors, Cementos Argos, which has established a leading position in the Colombian Caribbean coast, Antioquia and Southwest region markets, and LafargeHolcim Colombia.

The ready-mix concrete industry in Colombia is fairly consolidated with the top three producers accounting for approximately 70% of the market as of December 31, 2016. CEMEX Colombia was the second-largest ready-mix concrete producer as of December 31, 2016. The first- and third-largest producers were Cementos Argos and LafargeHolcim Colombia, respectively.

The aggregates market in Colombia is highly fragmented and is dominated by the informal market. CEMEX Colombia was the largest aggregates producer in Colombia as of December 31, 2016. Approximately 80% of the aggregates market in Colombia was comprised of small independent producers as of December 31, 2016.

### Our Operating Network in Colombia



#### **Products and Distribution Channels**

*Cement.* For the year ended December 31, 2016, our cement operations represented approximately 54% of net sales for our operations in Colombia before eliminations resulting from consolidation in Mexican Peso terms.

*Ready-Mix Concrete*. For the year ended December 31, 2016, our ready-mix concrete operations represented approximately 27% of net sales for our operations in Colombia before eliminations resulting from consolidation in Mexican Peso terms.

*Aggregates*. For the year ended December 31, 2016, our aggregates operations represented approximately 8% of net sales for our operations in Colombia before eliminations resulting from consolidation in Mexican Peso terms.

Description of Properties, Plants and Equipment. As of December 31, 2016, CEMEX Colombia owned two operating cement plants and three mills, having a total annual installed capacity of 4.0 million tons. In addition, through its grinding mills, CEMEX Colombia has the ability to produce 0.5 million tons of cement sourced by third parties. In 2016, we replaced 23.7% of our total fuel consumed in CEMEX Colombia with alternative fuels, and we have an internal electricity generating capacity of approximately 174 MW. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves of our operations in Colombia had an average remaining life of approximately 54 and 43 years, respectively, assuming 2012-2016 average annual cement production levels. The operating licenses for quarries in Colombia are renewed every 30 years; assuming renewal of such licenses, we estimate having sufficient limestone reserves for our operations in Colombia for over 200 years assuming 2012-2016 average annual cement production levels. As of December 31, 2016, CEMEX Colombia operated ten land distribution centers, two mortar plants, 44 ready-mix concrete plants (which includes 30 fixed plants and 14 mobile plants) and five aggregates operations. As of that date, CEMEX Colombia also owned 13 limestone quarries.

CEMEX Colombia is also building a new cement plant in the Antioquia department of the Municipality of Maceo, Colombia. See "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings," for the status of that project.

Capital Expenditures. We made capital expenditures of approximately U.S.\$101 million in 2014, U.S.\$156 million in 2015 and U.S.\$180 million in 2016 in our operations in Colombia. We currently expect to make capital expenditures of approximately U.S.\$96 million in our operations in Colombia during 2017.

### Rest of South, Central America and the Caribbean

As of December 31, 2016, our operations in the Rest of SAC segment consisted primarily of our operations in Costa Rica, the Dominican Republic, Jamaica, Nicaragua, Panama, Puerto Rico and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina. These operations represented approximately 7% of our net sales, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our business in the Rest of SAC segment represented approximately 4% of our total assets.

### Our Operations in Costa Rica

*Overview*. As of December 31, 2016, we indirectly owned through CEMEX Latam an approximate 99.9% interest in CEMEX Costa Rica, our main operating subsidiary in Costa Rica and a leading cement producer in the country.

During 2015, a total of U.S.\$5 million were invested as part of a program to increase the overall capacity in the Colorado plant, allowing a 10% throughput increase that catered to our Nicaragua plant's needs during 2016.

*Industry*. We estimate that approximately 1.3 million tons of cement were sold in Costa Rica during 2016. In 2016, the market had an estimated ratio of 50/50 in the bulk/bagged mix due to the execution of two major infrastructure projects.

*Competition.* The Costa Rican cement industry currently includes two producers. CEMEX Costa Rica and LafargeHolcim Costa Rica have integrated lines. Further, in 2016 an estimated 93,000 tons were imported by a local construction company.

Description of Properties, Plants and Equipment. As of December 31, 2016, CEMEX Costa Rica operated one cement plant and one grinding mill in Costa Rica, with a total annual installed capacity of 0.9 million tons. As of that date, CEMEX Costa Rica had six operational ready-mix concrete plants, one aggregates quarry and one land distribution center.

*Exports*. During 2016, clinker exports by our operations in Costa Rica represented approximately 30% of our total production and were made to our Nicaragua plant.

Capital Expenditures. We made capital expenditures of approximately U.S.\$6 million in 2014, U.S.\$10 million in 2015 and U.S.\$4 million in 2016 in our operations in Costa Rica. We currently expect to make capital expenditures of approximately U.S.\$6 million in our operations in Costa Rica during 2017.

#### Our Operations in the Dominican Republic

Overview. As of December 31, 2016, CEMEX Dominicana, S.A. ("CEMEX Dominicana") was our main subsidiary in the Dominican Republic and a leading cement producer in the country. CEMEX Dominicana's sales network covers the country's main consumption areas, which are Santo Domingo, Santiago de los Caballeros, La Vega, San Pedro de Macorís, Samaná and La Altagracia. On May 8, 2000, CEMEX Dominicana entered into a lease agreement with the government of the Dominican Republic related to the exploitation of a gypsum mine located at Las Salinas, Barahona, which has enabled CEMEX Dominicana to supply all local and regional gypsum requirements. The lease agreement expires on May 8, 2025 and may be extended by the parties.

*Industry*. In 2016, cement consumption in the Dominican Republic reached 4.2 million tons according to our estimates.

Competition. Our principal competitors in the Dominican Republic are Domicem, a mixed Italian/local cement producer; Cementos Cibao, a local competitor; Cemento Colón, an affiliated grinding operation of

Cementos Argos; Cementos Santo Domingo, a cement grinding partnership between a local investor and Cementos La Union from Spain; Cementos Panam, a local cement producer which has an installed grinding operation and recently constructed a cement kiln; and Cementos Andinos, a Colombian cement producer which has an installed grinding operation and a partially constructed cement kiln.

Description of Properties, Plants and Equipment. As of December 31, 2016, CEMEX Dominicana operated one cement plant in the Dominican Republic, with an installed capacity of 2.6 million tons per year. As of that date, CEMEX Dominicana also owned eight ready-mix concrete plants, one aggregates quarry, two land distribution centers and two marine terminals.

Capital Expenditures. We made capital expenditures of approximately U.S.\$7.5 million in 2014, U.S.\$17 million in 2015 and U.S.\$9 million in 2016 in our operations in the Dominican Republic. We currently expect to make capital expenditures of approximately U.S.\$12 million in our operations in the Dominican Republic during 2017.

#### Our Operations in Panama

*Overview*. As of December 31, 2016, we indirectly held through CEMEX Latam an approximate 99.5% interest in Cemento Bayano, S.A. ("Cemento Bayano"), our main subsidiary in Panama and a leading cement producer in the country.

*Industry*. We estimate that approximately 1.7 million cubic meters of ready-mix concrete were sold in Panama during 2016. Cement consumption in Panama decreased 7% in 2016, due to termination of the Panama Canal Expansion project.

*Competition*. The cement industry in Panama includes three cement producers: Cemento Bayano, Argos Panamá, an affiliate of Cementos Argos, and Cemento Interoceánico.

Description of Properties, Plants and Equipment. As of December 31, 2016, Cemento Bayano operated one cement plant in Panama, with an annual installed capacity of 2.1 million tons. As of that date, Cemento Bayano also owned and operated 15 ready-mix concrete plants, two aggregates quarries and four land distribution centers.

*Capital Expenditures*. We made capital expenditures of approximately U.S.\$10 million in 2014, U.S.\$19 million in 2015 and U.S.\$7 million in 2016 in our operations in Panama. We currently expect to make capital expenditures of approximately U.S.\$13 million in our operations in Panama during 2017.

### Our Operations in Nicaragua

*Overview*. As of December 31, 2016, CEMEX Latam owned 100% of CEMEX Nicaragua, S.A. ("CEMEX Nicaragua"), our operating subsidiary in Nicaragua.

*Industry*. We estimate that approximately 0.9 million tons of cement, approximately 0.3 million cubic meters of ready-mix concrete and approximately 6.6 million tons of aggregates were sold in Nicaragua during 2016.

*Competition*. Two market participants compete in the Nicaraguan cement industry, CEMEX and LafargeHolcim.

Description of Properties, Plants and Equipment. As of December 31, 2016, we leased and operated one fixed cement plant and one grinding mill with a total installed capacity of 0.6 million tons, six ready-mix plants, one aggregates quarry and two distribution centers in Nicaragua. Since March 2003, CEMEX Nicaragua has also leased a 100,000 ton milling plant in Managua, which has been used exclusively for pet coke milling.

Capital Expenditures. We made capital expenditures of approximately U.S.\$21.5 million in 2014, U.S.\$9 million in 2015 and U.S.\$3 million in 2016 in our operations in Nicaragua. We currently expect to make capital expenditures of approximately U.S.\$6 million in our operations in Nicaragua during 2017.

### Our Operations in Puerto Rico

*Overview*. As of December 31, 2016, CEMEX de Puerto Rico, Inc. ("CEMEX Puerto Rico") was our main subsidiary in Puerto Rico.

Industry. In 2016, cement consumption in Puerto Rico reached 0.48 million tons according to our estimates.

*Competition.* The cement industry in Puerto Rico in 2016 was comprised of three cement producers: CEMEX Puerto Rico, San Juan Cement Co. and Cementos Argos (formerly Antilles Cement Co).

Description of Properties, Plants and Equipment. As of December 31, 2016, CEMEX Puerto Rico operated one cement plant with an installed cement capacity of approximately 1.2 million tons per year. As of that date, CEMEX Puerto Rico also owned and operated seven ready-mix concrete plants and two land distribution centers. As of that date, CEMEX Puerto Rico also owned an aggregates quarry, which is currently closed, and one marine terminal used for fly ash.

Capital Expenditures. We made capital expenditures of approximately U.S.\$9 million in 2014, U.S.\$5 million in 2015 and U.S.\$2 million in 2016 in our operations in Puerto Rico. We currently expect to make capital expenditures of approximately U.S.\$2 million in our operations in Puerto Rico during 2017.

### Our Operations in Guatemala

Overview. As of December 31, 2016, CEMEX Latam owned 100% of CEMEX Guatemala, our main operating subsidiary in Guatemala. As of December 31, 2016, we owned and operated one cement grinding mill in Guatemala with an installed capacity of 500,000 tons per year. As of that date, we also owned and operated three land distribution centers, one clinker dome close to the maritime terminal in the southern part of the country and four ready-mix plants.

Capital Expenditures. We made capital expenditures of approximately U.S.\$1.2 million in 2014, U.S.\$2 million in 2015 and U.S.\$6 million in 2016 in Guatemala. We currently expect to make capital expenditures of approximately U.S.\$3 million in our operations in Guatemala during 2017.

### Our Operations in Other South, Central American and Caribbean Countries

*Overview*. As of December 31, 2016, CEMEX España indirectly held 100% of Readymix Argentina, S.A., which owns two ready-mix concrete plants in Argentina.

We believe that the Caribbean region holds considerable strategic importance because of its geographic location. As of December 31, 2016, we operated a network of nine marine terminals in the Caribbean region, which facilitated exports from our operations in several countries, including Mexico, the Dominican Republic, Puerto Rico and the United States. Three of our marine terminals are located in the main cities of Haiti, two are in the Bahamas, and one is in Manaus, Brazil. As of December 31, 2016, we also had a non-controlling interest in two other terminals, one in Bermuda and the other in the Cayman Islands.

As of December 31, 2016, we had non-controlling positions in TCL, with cement operations in Trinidad and Tobago, Barbados and Jamaica, as well as a non-controlling position in Caribbean Cement Company Limited in Jamaica, National Cement Ltd. in the Cayman Islands and Maxcem Bermuda Ltd. in Bermuda. As of December 31, 2016, CEMEX España indirectly held a 100% interest in CEMEX Jamaica Limited, which

operates one calcined lime plant in Jamaica with a capacity of approximately 120,000 tons per year and one hydrate line with a capacity of approximately 4.800 tons per year. As of December 31, 2016, we also held a non-controlling position in Societe des Ciments Antillais, a company with cement operations in Guadalupe and Martinique.

On December 5, 2016, Sierra presented an Offer to all shareholders of TCL, a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL, which, together with Sierra's existing share ownership in TCL of approximately 39.5%, would, if successful, result in Sierra holding up to 74.9% of the equity share capital in TCL. The total number of TCL shares tendered and accepted in response to the Offer was 113,629,723, which, together with Sierra's pre-existing shareholding in TCL (147,994,188 shares), represented approximately 69.83% of the outstanding TCL shares as of March 31, 2017. The total cash payment by Sierra for the tendered shares was approximately U.S.\$86.36 million. CEMEX started consolidating TCL for financial reporting purposes on February 1, 2017. TCL has de-listed from the Jamaica and Barbados stock exchanges.

Capital Expenditures. We made capital expenditures in our other operations in SAC of approximately U.S.\$1 million in 2014, U.S.\$2 million in 2015 and U.S.\$3 million in 2016. We currently expect to make capital expenditures of approximately U.S.\$31 million in our operations in other SAC countries during 2017.

#### Asia, Middle East and Africa

For the year ended December 31, 2016, our business in Asia, Middle East and Africa, which includes our operations in the Philippines, Egypt and the Rest of Asia, Middle East and Africa segment, as described below, represented approximately 12% of our net sales before eliminations resulting from consolidation. As of December 31, 2016, our business in Asia represented approximately 11% of our total installed capacity and approximately 5% of our total assets.

### Our Operations in Egypt

Overview. As of December 31, 2016, ACC was our main subsidiary in Egypt. As of December 31, 2016, we operated one cement plant in Egypt, with an annual installed capacity of approximately 5.4 million tons. This plant is located approximately 280 miles south of Cairo and serves the upper Nile region of Egypt, as well as Cairo and the delta region, Egypt's main cement market. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves of our operations in Egypt had an average remaining life of approximately 52 and 53 years, respectively, assuming 2012-2016 average annual cement production levels. In addition, as of December 31, 2016, we operated 11 ready-mix concrete plants, of which four are owned and seven are under management contracts and ten land distribution centers in Egypt. For the year ended December 31, 2016, our operations in Egypt represented approximately 3% of our net sales before eliminations resulting from consolidation and approximately 1% of our total assets.

See "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings—Other Legal Proceedings—Egypt Share Purchase Agreement" for a description of certain legal proceedings relating to the share purchase agreement, signed in November 1999 between CEMEX, S.A.B. de C.V. and state-owned Metallurgical Industries Company, pursuant to which CEMEX, S.A.B. de C.V. acquired a controlling interest in ACC.

Industry. According to the Ministry of Investment official figures, based on government data (local and imported cement), the Egyptian market consumed approximately 56.3 million tons of cement during 2016. Cement consumption increased by approximately 5.3% in 2016 compared to 2015, which was mainly attributed to government projects related to the Suez Canal tunnels and port platforms in the city of Port Said, as well housing complexes. As of December 31, 2016, the cement industry in Egypt had a total of 19 cement producers, with an aggregate annual installed cement production capacity of approximately 75.3 million tons.

Competition. According to the Ministry of Investment official figures, during 2016, LafargeHolcim (Egyptian Cement Company), CEMEX (Assiut) and Italcementi (Suez Cement, Torah Cement and Helwan Portland Cement) were three of the largest cement producers in the world and represented approximately 37% of the total cement production in Egypt. Other significant competitors in Egypt are Arabian (La Union), Titan (Alexandria Portland Cement and Beni Suef Cement), Ameriyah (Cimpor/Camargo Corrêa), National, Sinai (Vicat), Sinai White cement (Cementir), South Valley, Nile Valley, El Sewedy, Army Cement, Aswan Medcom, Misr Beni Suef, Al Nahda and Misr Quena Cement Companies, Building Materials Industries Co. ASEC Cement, and Egyptian Kuwait Holding Company.

Cement and Ready-Mix Concrete. For the year ended December 31, 2016, cement represented approximately 83.4% and ready-mix concrete represented approximately 12.8% of net sales for our operations in Egypt before eliminations resulting from consolidation.

Capital Expenditures. We made capital expenditures of approximately U.S.\$31 million in 2014, U.S.\$47 million in 2015 and U.S.\$20 million in 2016 in our operations in Egypt. We currently expect to make capital expenditures of approximately U.S.\$23 million in our operations in Egypt during 2017.

### Our Operations in the Philippines

Overview. As of December 31, 2016, on a consolidated basis through various subsidiaries, CEMEX España held 100% of CASE, which in turn owned 55% of the outstanding share capital of CHP. CHP directly and indirectly owns 100% of our two operating subsidiaries in the Philippines, Solid Cement Corporation ("Solid Cement") and APO Cement Corporation ("APO"). For the year ended December 31, 2016, our operations in the Philippines represented approximately 4% of our net sales before eliminations resulting from consolidation. As of December 31, 2016, our operations in the Philippines represented approximately 2% of our total assets.

On July 18, 2016, CHP closed its initial public offering of 45% of its common shares in the Philippines, and 100% of CHP's common shares started trading on the Philippine Stock Exchange under the ticker "CHP." As of March 31, 2017, CASE, an indirect subsidiary of CEMEX España, directly owned approximately 55% of CHP's outstanding common shares. The net proceeds to CHP from its initial public offering were approximately U.S.\$506.8 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CHP. CHP used the net proceeds from the initial public offering to repay existing indebtedness owed to BDO Unibank and to an indirect subsidiary of CEMEX.

We initiated a new 1.5 million ton integrated cement production line at CEMEX's Solid plant in Luzon with an estimated investment of approximately U.S.\$225 million. We expect that this new line will double the capacity of the Solid plant and will represent a 26% increase in our cement capacity in the Philippines. As of December 31, 2016, the production line was not finalized.

*Industry*. According to the Cement Manufacturers' Association of the Philippines (CEMAP), cement consumption in the Philippine market totaled 26 million tons during 2016.

*Competition*. As of December 31, 2016, our major competitors in the Philippine cement market were LafargeHolcim, Republic, Eagle, Northern, Goodfound, Taiheiyo and Mabuhay.

Description of Properties, Plants and Equipment. As of December 31, 2016, our operations in the Philippines included two cement plants with an annual installed capacity of 4.5 million tons, exclusive access to two quarries to supply raw materials to our cement plants, 18 land distribution centers and four marine distribution terminals. We estimate that, as of December 31, 2016, the limestone and clay permitted proven and probable reserves accessed by our operations in the Philippines had an average remaining life of approximately 41 and 14 years, respectively, assuming 2012-2016 average annual cement production levels.

*Cement.* For the year ended December 31, 2016, our cement operations represented 96% of net sales for our operations in the Philippines after eliminations resulting from consolidation.

Capital Expenditures. We made capital expenditures of approximately U.S.\$52 million in 2014, U.S.\$21 million in 2015 and U.S.\$30 million in 2016 in our operations in the Philippines. We currently expect to make capital expenditures of approximately U.S.\$41 million in our operations in the Philippines during 2017.

### Rest of Asia, Middle East and Africa

Our operations in the Rest of Asia, Middle East and Africa, which as of December 31, 2016, consisted primarily of our operations in Malaysia, Israel and the UAE. These operations represented approximately 5% of our net sales in Mexican Peso terms, before eliminations resulting from consolidation, for the year ended December 31, 2016, and less than 2% of our total assets as of December 31, 2016.

# Sale of our Operations in Rest of Asia, Middle East and Africa

On March 10, 2016, CEMEX, S.A.B. de C.V. announced the sale of its operations in Bangladesh and Thailand to SIAM Cement for approximately U.S.\$53 million, which closed on May 26, 2016. The proceeds from this transaction were used mainly for debt reduction and for general corporate purposes.

#### Our Operations in Malaysia

*Overview*. As of December 31, 2016, CEMEX Concrete Malaysia L.L.C. was our main subsidiary in Malaysia. We are a leading ready-mix concrete producer in Malaysia, with a significant share in the country's major urban centers. As of December 31, 2016, we operated 11 ready-mix concrete plants, one asphalt plant and one aggregates quarry in Malaysia.

*Competition*. Our main competitors in the ready-mix concrete and aggregates markets in Malaysia are YTL, LafargeHolcim, Heidelberg, Chin Hin Concrete, Tasek Concrete and Hanson.

Capital Expenditures. We made capital expenditures of approximately U.S.\$1 million in 2014, U.S.\$2 million in 2015 and U.S.\$1 million in 2016 in our operations in Malaysia. We currently expect to make capital expenditures of approximately U.S.\$1 million in our operations in Malaysia during 2017.

### Our Operations in Israel

Overview. As of December 31, 2016, CEMEX Holdings (Israel) Ltd. was our main subsidiary in Israel. We are a leading producer and supplier of raw materials for the construction industry in Israel. In addition to ready-mix concrete and aggregates, we produce a diverse range of building materials and infrastructure products in Israel. As of December 31, 2016, we operated 63 ready-mix concrete plants, six aggregates quarries, one sand pit, one concrete products plant, one admixtures plant, and one lime factory in Israel.

Capital Expenditures. We made capital expenditures of approximately U.S.\$15 million in 2014, U.S.\$13 million in 2015 and U.S.\$16 million in 2016 in our operations in Israel. We currently expect to make capital expenditures of approximately U.S.\$17 million in our operations in Israel during 2017.

# Our Operations in the UAE

*Overview*. As of December 31, 2016, we held a 49% equity interest (and 100% economic benefit) in three of our main UAE companies: CEMEX Topmix LLC and CEMEX Supermix LLC, two ready-mix manufacturing companies, and CEMEX Falcon LLC, which specializes in the production of cement and slag. We are not allowed to have a controlling interest in these companies (UAE law requires 51% ownership by UAE nationals).

However, through agreements with other shareholders in these companies, we have control over the remaining 51% of the economic benefits in each of the companies. As a result, we own a 100% economic interest in all three companies. We also held 100% in a new company, CEMEX Arabia FZC, dedicated to trading activities (100% ownership is possible as it is located in a Free Zone). As of December 31, 2016, we operated seven ready-mix concrete plants and one cement and slag grinding facility in the UAE, serving the markets of Dubai and Abu Dhabi as well as neighboring countries such as Oman and Qatar.

Capital Expenditures. We made capital expenditures of approximately U.S.\$0.5 million in 2014, U.S.\$2 million in 2015 and U.S.\$4 million in 2016 in our operations in the UAE. We currently expect to make capital expenditures of approximately U.S.\$3 million in our operations in the UAE during 2017.

# **Our Trading Operations**

In 2016, we traded approximately 10.5 million tons of cementitious and non-cementitious materials in approximately 100 countries, including 8.0 million tons of cement and clinker. Approximately 5.5 million tons of the traded cement and clinker consisted of exports from our operations in Costa Rica, Croatia, the Czech Republic, the Dominican Republic, Germany, Guatemala, Latvia, Mexico, Nicaragua, the Philippines, Poland, Puerto Rico, Spain and the UAE. The remaining approximately 2.5 million tons were purchased from third parties in countries such as China, Honduras, Japan, South Korea, Spain, Taiwan, Thailand, Turkey, the United States and Vietnam. In 2016, we traded approximately 1.6 million tons of granulated blast furnace slag, a non-clinker cementitious material, and 0.9 million tons of other products.

Our trading network enables us to maximize the capacity utilization of our facilities worldwide while reducing our exposure to the inherent cyclicality of the cement industry. We are able to distribute excess capacity to regions around the world where there is demand. In addition, our worldwide network of strategically located marine terminals allows us to coordinate maritime logistics on a global basis and minimize transportation expenses. Our trading operations also enable us to explore new markets without significant initial capital expenditure.

Freight rates, which account for a large share of the total import supply cost, have been subject to significant volatility in recent years. Our trading operations, however, have obtained significant savings by contracting maritime transportation in due time and by using our own and chartered fleet, which transported approximately 64% of our cement and clinker traded volume during 2016.

In addition, based on our spare fleet capacity, we provide freight service to third parties, thus providing us with valuable shipping market information and generating additional revenues.

# **Our Cement Plants**

The following table provides a summary of our cement plants, including location, used capacity, including grinding mill production, and years of operation as of and for the year ended December 31, 2016:

Location	<b>Used Capacity</b>	Years of Operation(1)
Atotonilco, Hidalgo, México	1,518	58
Barrientos, Estado de México, México	909	72
Ensenada, Baja California, México	508	41
Guadalajara, Jalisco, México	934	43
CPN, Sonora, México	)J <del>T</del>	36
Hidalgo, Nuevo León, México		111
Huichapan, Hidalgo, México	3,443	32
	966	63
Mérida, Yucatán, México		
Monterrey, Nuevo León, México	1,619	97 52
Tamuín, San Luis Potosí, México	1,678	52
Tepeaca, Puebla, México	2,826	22
Torreón, Coahuila, México	1,135	50
Valles, San Luis Potosí, México	354	51
Yaqui, Sonora, México	1,977	27
Zapotiltic, Jalisco, México	1,560	49
Balcones, TX, United States	1,909	36
Brooksville, FL (North), United States		41
Brooksville, FL (South), United States	1,198	29
Clinchfield, GA, United States	710	42
Demopolis, AL, United States	802	39
Fairborn, OH, United States	605	42
Knoxville, TN, United States	616	37
Kosmosdale/Louisville, KY, United States	1,310	16
Miami, FL, United States	1,001	58
Lyons, CO, United States	284	36
Victorville, CA, United States	2,667	51
Wampum, PA, United States	_	51
Rugby, United Kingdom	1,194	17
Ferriby, United Kingdom	498	50
Rudersdof, Germany	2,133	51
Chelm, Poland	1,132	56
Rudniki, Poland	733	51
Broceni, Latvia	741	7
Alcanar, Spain	536	48
Buñol, Spain	571	49
Castillejo, Spain	326	105
Lloseta, Spain	307	49
Morata, Spain	375	84
San Vicente, Spain	270	41
Gador, Spain	238	40
Prachovice, Czech Republic	732	62
Assiut, Egypt	4,807	30
Kolovoz, Croatia	16	108
Juraj, Croatia	632	104
Kajo, Croatia	361	112
Cúcuta, Colombia	271	33
Ibagué, Colombia	2,360	24
Colorado, Costa Rica	518	37
San Pedro de Macorís, Dominican Republic	2,314	26
Calzada Larga, Panama	2,314 876	39
	390	74
San Rafael del Sur, Nicaragua(2)	276	26
Ponce, Puerto Rico	3,254	18
APO, Philippines		
Solid Cement, Philippines	1,580	23

<sup>(1)</sup> Approximate.

<sup>(2)</sup> Leased.

For the aggregate installed cement production capacity of our cement plants by region, see "Item 4—Information on the Company—Business Overview."

We have insurance coverage for our cement plants, which we believe is adequate and sufficient, in line with industry practices. However, in some instances our insurance coverage may not be sufficient to cover all of our potential unforeseen losses and liabilities. In addition, our insurance coverage may not cover all the risks to which our cement plants may be exposed. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—Our insurance coverage may not cover all the risks to which we may be exposed."

#### **Regulatory Matters and Legal Proceedings**

A description of material regulatory matters and legal proceedings affecting us is provided below.

### **Antitrust Proceedings**

Polish Antitrust Investigation. On January 2, 2007, CEMEX Polska received a notification from the Polish Competition and Consumer Protection Office (the "Protection Office") informing it of the formal initiation of an antitrust proceeding against all cement producers in Poland, including CEMEX Polska and another of our indirect subsidiaries in Poland. The notification alleged that there was an agreement between all cement producers in Poland regarding prices and other sales conditions for cement, an agreed division of the market with respect to the sale and production of cement, and the exchange of confidential information, all of which limited competition in the Polish market with respect to the production and sale of cement. On December 9, 2009, the Protection Office delivered to CEMEX Polska its decision against Polish cement producers related to an investigation which covered a period from 1998 to 2006. The decision imposed fines on a number of Polish cement producers, including CEMEX Polska. The fine imposed on CEMEX Polska was approximately Polish Zloty 115.56 million (approximately U.S.\$29.19 million as of March 31, 2017, based on an exchange rate of Polish Zloty 3.9582 to U.S.\$1.00), which is approximately 10% of CEMEX Polska's total revenue in 2008. CEMEX Polska disagreed with the decision, denied that it committed the practices alleged by the Protection Office and, therefore, on December 23, 2009, CEMEX Polska filed an appeal before the Polish Court of Competition and Consumer Protection in Warsaw (the "First Instance Court"). After a series of hearings, on December 13, 2013, the First Instance Court issued its judgment in regards with the appeals filed by CEMEX Polska and other cement producers, which were previously combined into a joint appeal. The First Instance Court reduced the penalty imposed on CEMEX Polska to approximately Polish Zloty 93.89 million (approximately U.S.\$23.72 million as of March 31, 2017 based on an exchange rate of Polish Zloty 3.9582 to U.S.\$1.00), which is equal to 8.125% of CEMEX Polska's revenue in 2008. On May 8, 2014, CEMEX Polska filed an appeal against the First Instance Court judgment before the Appeals Court in Warsaw. After several hearings in the Appeals Court, on a hearing held on March 11, 2016, the Appeals Court did not announce a final judgment; instead, it reopened the hearing phase which had been closed on February 26, 2016. The parties involved were informed that the Appeals Court will ask certain questions to the Polish Constitutional Tribunal regarding the conformity with the Polish Constitution of the calculation of the reduced penalty imposed on CEMEX Polska. With this action, the issuance of the final judgment has been further delayed. As of March 31, 2017, CEMEX Polska estimates that the final judgment will be issued during the second half of 2018. The above-mentioned penalty is not enforceable until the Appeals Court issues its final judgment and if the penalty is maintained in the Appeals Court final resolution, then the penalty will be payable within 14 calendar days of the announcement of the Appeals Court order regarding its final resolution. CEMEX Polska has created the accounting provision in relation with this proceeding in an amount equal to 100% of the reduced penalty of the First Instance Court judgment. As of March 31, 2017, we do not expect that an adverse resolution to this matter would have a material adverse impact on our results of operations, liquidity and financial condition.

Antitrust Investigation in Spain by the CNMC. On September 16 and 17, 2014, the Competition Directorate (Dirección de Competencia) of the Spanish National Commission of Markets and Competition (Comisión Nacional de los Mercados y la Competencia) ("CNMC"), in the context of an investigation of the Spanish

cement, ready-mix concrete and related products industry regarding alleged anticompetitive practices, inspected one of our facilities in Spain. On January 12, 2015, CEMEX España Operaciones was notified of the initiation by the CNMC of a disciplinary proceeding for alleged prohibited conducts pursuant to Article 1 of the Spanish Competition Law (Ley 15/2007, de 3 de Julio, de Defensa de la Competencia). On November 19, 2015, CEMEX España Operaciones was notified that the alleged anticompetitive practices covered the year 2013 for the cement market and the years 2008, 2009, 2012, 2013 and 2014 for the ready-mix market. On March 8, 2016, the Competition Directorate (Dirección de Competencia) notified CEMEX España Operaciones of a resolution proposal (propuesta de resolución) which considers that the alleged anti-competitive practices were carried out in the markets and years previously indicated. Thereafter, CEMEX España Operaciones submitted allegations rejecting the resolution proposal. On September 8, 2016, CEMEX España Operaciones was notified of a decision issued by the CNMC pursuant to which CEMEX España Operaciones has been required to pay a fine of €5,865,480 (approximately U.S.\$6.25 million as of March 31, 2017, based on an exchange rate of €0.9380 to U.S.\$1.00). On November 7, 2016, CEMEX España Operaciones filed an appeal before the National Court (Audiencia Nacional) against the CNMC's decision. The National Court has been requested to suspend the sanction, and, by a resolution issued on December 22, 2016, the National Court granted the requested suspension, subject to issuance of a bank guarantee for the principal amount of the sanction. The CNMC has been notified of both the interposition of the appeal and the request for suspension. As of March 31, 2017, we do not expect that an adverse resolution to this matter would have a material adverse impact on our results of operations, liquidity and financial condition.

Antitrust Case in Ohio. On October 2013, a nonstructural steel manufacturing joint venture in which CEMEX, Inc. has an indirect majority interest, other nonstructural steel manufacturers, and related associations were named as defendants in a lawsuit filed in Ohio State Court alleging a conspiracy among the defendants to adopt sham industry standards with a goal to exclude the plaintiffs' products from the market. The court granted the defendants motion for summary judgment dismissing the claims. On September 27, 2016, the plaintiffs filed an appeal against the decision. The summary judgment was affirmed by the Court of Appeals on March 27, 2017. As of March 31, 2017, we do not expect our operations, liquidity and financial condition to suffer a material adverse impact because of this matter.

Antitrust Investigation in Colombia. On September 5, 2013, CEMEX Colombia was notified of Resolution No. 49141 dated August 21, 2013, issued by the Colombian Superintendency of Industry and Commerce (Superintendencia de Industria y Comercio) ("SIC") pursuant to which the SIC opened an investigation and issued a statement of objections (pliego de cargos) against five cement companies and fourteen directors of those companies, including CEMEX Colombia, for alleged anti-competitive practices. On October 7, 2013, CEMEX Colombia answered the statement of objections and submitted evidence. The investigated parties are accused of allegedly breaching: (i) Article 1 of Law 155 of 1959, which prohibits any kind of practice, procedure or system designed to limit free competition and determining or maintaining unfair prices; (ii) numeral 1 of Article 47 of Decree 2153 of 1992, which prohibits any agreements designed to directly or indirectly fix prices; and (iii) numeral 3 of Article 47 of Decree 2153 of 1992, which prohibits any market sharing agreements between producers or between distributors. Additionally, the fourteen executives, including a former legal representative and the current President of CEMEX Colombia, are being investigated for allegedly breaching paragraph 16 of Article 4 of Decree 2153 of 1992, as amended by Article 26 of Law 1340 of 2009, which provides that the SIC may investigate and sanction any individual who collaborates, facilitates, authorizes, executes or tolerates behavior that violates free competition rules. Although the SIC announced three charges, only two of them were under investigation, namely, price fixing agreements and market sharing agreements.

If the alleged infringements investigated by the SIC are substantiated, aside from any measures that could be ordered to stop the alleged anti-competitive practices, the following penalties may be imposed against CEMEX Colombia pursuant to Law 1340 of 2009: (i) up to 100,000 times the legal monthly minimum wage, which equals approximately 58,950 million Colombian Pesos (approximately U.S.\$20.46 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00) for each violation and to each company being declared in breach of the competition rules, and (ii) up to 2,000 times the legal monthly minimum wage, which

equals approximately 1,179 million Colombian Pesos (approximately U.S.\$409,340.89 as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00) against those individuals found responsible of collaborating, facilitating, authorizing, executing or tolerating behavior that violates free competition rules. On December 18, 2014, a hearing regarding this matter took place and the parties involved presented their closing arguments. A non-binding report which contains an analysis of all evidence gathered during the investigation and which could provide a recommendation to impose sanctions or to close the investigation is expected to be issued by the Superintendent Delegate for Competition Protection for the benefit of the SIC. As of March 31, 2017, this non-binding report has not been issued and we cannot estimate when it will be issued. Once the non-binding report is issued, the investigated parties will have twenty business days to file their final arguments against it. If the SIC decides to impose a sanction against CEMEX Colombia, we have the possibility of filing several recourses that are available to us, including a reconsideration request before the SIC and, if the reconsideration request does not succeed, challenging the validity of the SIC's decision before the Colombian Administrative Courts, which could take more than six years in order to have a final decision. At this stage of the investigations, as of March 31, 2017, we are not able to assess the likelihood of the SIC imposing any measures and/or penalties against CEMEX Colombia, but if any penalties are imposed, as we do not expect such penalties would be for the maximum amounts permitted by applicable laws and because there are recourses available to us that would take a considerable amount of time to get resolved, we do not expect this matter to have a material adverse impact on our results of operations, liquidity and financial condition.

Information Request in Costa Rica. In March 2016, the Competition Directorate of Costa Rica notified CEMEX Costa Rica of a formal information request that has the objective of calculating the cement market share in Costa Rica and the geographical areas in which CEMEX Costa Rica has a presence. The Competition Directorate of Costa Rica is requesting this information as a result of a claim made by a third party. CEMEX Costa Rica delivered the requested information also during March 2016. In July 2016, the Competition Directorate of Costa Rica resolved that there is no evidence of anti-competitive practice and took no further action with respect to the claim.

### **Environmental Matters**

In the ordinary course of business, we are subject to a broad range of environmental laws and regulations in each of the jurisdictions in which we operate. These laws and regulations impose increasingly stringent environmental protection standards regarding, among other things, air emissions, wastewater discharges, the use and handling of hazardous waste or materials, waste disposal practices and the remediation of environmental damage or contamination. These laws and regulations expose us to the risk of substantial environmental costs and liabilities, including liabilities associated with divested assets and past activities and, in some cases, the acts and omissions of the previous owners or operators of a property or facility that we own or operate. Furthermore, in some jurisdictions, certain environmental laws and regulations impose liability without regard to fault or the legality of the original activity at the time of the actions giving rise to liability. To prevent, control and remediate environmental problems and maintain compliance with regulatory requirements, in line with our global initiatives on environmental management, we maintain an environmental policy designed to monitor and control environmental matters. Our environmental policies require that each of our subsidiaries respect and comply with local laws and meet our own internal standards to minimize the use of non-renewable resources and the generation of hazardous and other wastes. We use processes that are designed to reduce the impact of our operations on the environment throughout all the production stages in all our operations worldwide. In addition, during 2012 we started the implementation of a global EMS at our operating sites that provides a framework to facilitate the consistent and systematic implementation of practical, risk-based environmental management at all sites. As of March 31, 2017, we expect to finish the implementation of the EMS at all of our operating sites by December 31, 2020. It will be used to support sites and businesses across CEMEX globally to document, maintain and continuously improve our environmental performance. We believe that, as of March 31, 2017, a substantial part of our operations already comply with all material environmental laws applicable to us, as all our cement plants already have some kind of EMS (most of which are ISO 14000 certified by the International Organization for Standardization ("ISO")), with the remaining implementation efforts directed mainly on our aggregates and ready-mix plants.

We regularly incur capital expenditures that have an environmental component or that are impacted by environmental regulations. However, we do not keep separate accounts for such mixed capital and environmental expenditures. Environmental expenditures that extend the life, increase the capacity, improve the safety or efficiency of assets or are incurred to mitigate or prevent future environmental contamination may be capitalized. Other environmental costs are expensed when incurred. For the years ended December 31, 2014, 2015 and 2016, our sustainability capital expenditures (including our environmental expenditures and investments in alternative fuels and cementitious materials) were approximately U.S.\$85.1 million, approximately U.S.\$86.03 million and approximately U.S.\$79.9 million, respectively. As of March 31, 2017, we do not expect a material increase in our environmental expenditures in 2017.

The following is a discussion of environmental regulations and related matters in our major markets.

Mexico. We were one of the first industrial groups in Mexico to sign an agreement with the Mexican Ministry of Environment and Natural Resources (Secretaría del Medio Ambiente y Recursos Naturales) ("SEMARNAT") to carry out voluntary environmental audits in our 15 Mexican cement plants under a government-run program. In 2001, the Mexican Environmental Protection Agency (Procuraduría Federal de Protección al Ambiente), which is part of SEMARNAT, completed the audit of our cement plants and awarded each of them a Clean Industry Certificate (Certificado de Industria Limpia) ("CIC") certifying that our cement plants are in full compliance with applicable environmental laws. The CICs are subject to renewal every two years. As of March 31, 2017, our operating cement plants had CICs or were in the process of renewing them. We expect the renewal of all currently expired CICs.

For over a decade, the technology for recycling used tires into an energy source has been employed in our plants located in Ensenada and Huichapan. By the end of 2006, all our cement plants in Mexico were using tires as an alternative fuel. Municipal collection centers in the cities of Tijuana, Mexicali, Ensenada, Mexico City, Reynosa, Nuevo Laredo and Guadalajara currently enable us to recycle an estimated 10,000 tons of tires per year. Overall, approximately 14.02% of the total fuel used in our operating cement plants in Mexico during 2016 was comprised of alternative fuels.

Between 1999 and March 31, 2017, our operations in Mexico have invested approximately U.S.\$113.19 million in the acquisition of environmental protection equipment and the implementation of the ISO 14001:2004 environmental management standards of ISO. The audit to obtain the renewal of the ISO 14001:2004 certification took place during the first quarter of 2015 and our operating cement plants in Mexico obtained the renewal of the ISO 14001:2004 certification for environmental management systems which is valid for a three year period.

On June 6, 2012 the General Law on Climate Change (Ley General de Cambio Climático) (the "Climate Change Law") was published in the Mexican Official Gazette. The Climate Change Law establishes a legal framework to regulate policies for climate change mitigation and adaptation. Many important provisions require the development of secondary legislation, and depend on the publication of subsequent implementing regulations. For instance, the Climate Change Law provides, among others, for (i) the elaboration of a registry of the emissions that are generated by fixed sources, (ii) companies to report their emissions, if required, and (iii) the application of fines to those companies that fail to report or that report false information. In this regard, on October 29, 2014, the Regulations to the General Law on Climate Change Regarding the National Registry of Emissions (Reglamento de la Ley General de Cambio Climático en Materia del Registro Nacional de Emisiones) (the "Regulations") became effective. The purpose of the Regulations is to govern the Climate Change Law regarding the National Registry of Emissions, identifying the sectors and subsectors, which include among others, the cement industry, that must file the corresponding reports before the National Registry of Emissions. We had previously reported our direct and indirect carbon dioxide emissions to SEMARNAT under a voluntary scheme. The Climate Change Law also allows for the establishment of specific greenhouse gas reduction targets in accordance with the respective contribution of each economic sector to the national greenhouse gas emissions. We cannot estimate at this time the impact, if any, that any measures related to this may have upon our

operations in Mexico. Although the Climate Change Law does not establish a program for emissions trading, it does vest on the Mexican federal government the power to create, authorize and regulate such a scheme, which may be voluntary or binding. We are closely observing the development of implementing regulations and, as of March 31, 2017, we cannot estimate the impact, if any, that any measures related to this may have upon our operations in Mexico. A Special Tax on Production and Services (*Impuesto Especial Sobre Producción y Servicios*) on the sale of fossil fuels was included in the tax reform that became effective on January 1, 2014. Starting January 1, 2014, petroleum coke, a primary fuel widely used in our kilns in Mexico has been taxed at a rate of Ps15.60 (approximately U.S.\$0.84 as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) per ton.

On August 12, 2014, a package of energy reform legislation became law in Mexico. The then newly enacted energy reform legislation, which included nine new laws, as well as amendments to existing laws, implemented the December 2013 constitutional energy reform and established a new legal framework for Mexico's energy industry. One of the new laws that was enacted is the Electric Industry Law (Ley de la Industria Eléctrica) (the "Electric Industry Law"), which establishes a legal framework for electricity-related activities in Mexico, which has the effect of structurally changing the national electric industry. On October 31, 2014, certain rules and regulations related to the energy reform legislation, including the regulations of the Electric Industry Law, were published. As part of the Electric Industry Law, a system for tradable clean energy certificates was created and certain clean energy procurement obligations were imposed on consumers. The clean energy procurement obligations for 2018 to 2021 have been announced at 5%, 5.8%, 7.4%, 10.9% and 13.9%, respectively, and this requirement is expected to increase in subsequent years. CEMEX's operations in Mexico have ongoing commitments to procure power from renewable projects operating under the "self-supply" framework of the former Electric Energy Public Service Law, and the energy supplied under these contracts is exempted from the clean energy obligation. Nonetheless, starting in 2018, we will be required to acquire clean energy certificates to comply with the clean energy obligations for the fraction of energy supply that does not come from clean generators. Over time, according to the penalty levels set by the Mexican Energy Regulatory Commission (Comisión Reguladora de Energía), non-compliance with the clean energy procurement obligations could have a material adverse impact on our business or operations.

On September 8, 2015, the Electricity Market Rules (*Bases del Mercado Eléctrico*) (the "Rules") were published in the Federal Official Gazette and became effective on September 9, 2015. The Rules, which are an important step forward in the implementation of the reforms enacted regarding Mexico's energy industry, contain the design and operation principles of the different components of the wholesale electricity market (the "Electricity Market"). As of March 31, 2017, we have participated in the Electricity Market by submitting bids at auctions for certain projects and we have also participated in auctions for certain other projects.

United States. Our operating subsidiaries in the United States are subject to a wide range of U.S. federal, state and local laws, regulations and ordinances dealing with the protection of human health and the environment that are strictly enforced and can lead to significant monetary penalties for noncompliance. These laws and regulations expose us to the risk of substantial environmental costs and liabilities, including liabilities associated with divested assets and past activities and, in some cases, the acts and omissions of the previous owners or operators of a property or facility. These laws regulate, among other things, water discharges, noise, and air emissions, including dust, as well as the handling, use and disposal of hazardous and non-hazardous waste materials. Certain laws also create a shared liability scheme under which parties are held responsible for the cost of cleaning up releases to the environment of designated hazardous substances. We therefore may have to conduct environmental remediation associated with the disposal or release of hazardous substances at our various operating facilities, or at sites in the United States to which we sent hazardous waste for disposal. We believe that our current procedures and practices for handling and managing materials are generally consistent with industry standards and legal and regulatory requirements, and that we take appropriate precautions to protect employees and others from harmful exposure to hazardous materials.

As of March 31, 2017, CEMEX, Inc. and its subsidiaries had accrued liabilities specifically relating to environmental matters in the aggregate amount of approximately U.S.\$31.99 million. The environmental matters

relate to (i) the disposal of various materials, in accordance with past industry practice, that might be categorized as hazardous substances or wastes, and (ii) the cleanup of hazardous substances or wastes at sites used or operated by CEMEX, Inc. and its subsidiaries including discontinued operations, either individually or jointly with other parties. Most of the proceedings are in the preliminary stages, and a final resolution might take several years. For purposes of recording the provision, CEMEX, Inc. and its subsidiaries consider that it is probable that a liability has been incurred and the amount of the liability is reasonably estimable, whether or not claims have been asserted, and without giving effect to any possible future recoveries. Based on information developed to date, CEMEX, Inc. does not believe it will be required to spend significant sums on these matters, in excess of the amounts previously recorded. The ultimate cost that might be incurred to resolve these environmental issues cannot be assured until all environmental studies, investigations, remediation work, and negotiations with, or litigation against, potential sources of recovery have been completed.

In 2007, the EPA launched a CAA enforcement initiative against the U.S. cement industry. The primary goal of the initiative is to assess the industry's historic compliance with the CAA's New Source Review program and to reduce emissions from the industry through the installation of add-on controls. CEMEX has actively engaged with the EPA on its investigations, which involve multiple CEMEX facilities, and has entered into four settlements involving a total of U.S.\$6.1 million in civil penalties and a commitment to incur certain capital expenditures for pollution control equipment at its Victorville, California, Fairborn (divested on February 10, 2017), Ohio, Lyons, Colorado, Knoxville, Tennessee, Louisville, Kentucky, Demopolis, Alabama, Odessa, Texas (divested on November 18, 2016) and New Braunfels, Texas plants. Although some of these proceedings are still not finalized, based on our past experience with such matters and currently available information, as of March 31, 2017, we believe that such cases will not have a material adverse impact on our results of operations, liquidity and financial condition.

In 2002, CEMEX Construction Materials Florida, LLC (formerly Rinker Materials of Florida, Inc.) ("CEMEX Florida"), a subsidiary of CEMEX, Inc., was granted a federal quarry permit and was the beneficiary of another federal quarry permit for the Lake Belt area in South Florida. The permit held by CEMEX Florida covered CEMEX Florida's SCL and FEC quarries. CEMEX Florida's Kendall Krome quarry is operated under the permit of which it was a beneficiary. The FEC quarry is the largest of CEMEX Florida's quarries measured by volume of aggregates mined and sold. CEMEX Florida's Miami cement mill is located at the SCL quarry and is supplied by that quarry, while the FEC and Kendall Krome quarries have supplied aggregates to CEMEX and third-party users. In response to litigation brought by environmental groups concerning the manner in which the federal quarry permits were granted, in January 2009, the U.S. District Court for the Southern District of Florida ordered the withdrawal of the federal quarry permits for CEMEX Florida's SCL, FEC and Kendall Krome quarries. The judge ruled that there were deficiencies in the procedures and analysis undertaken by the Army Corps of Engineers ("Corps") in connection with the issuance of the permits. Upon appeal, on January 21, 2010, the Eleventh Circuit Court of Appeals affirmed the district court's ruling withdrawing the federal quarry permits for the three CEMEX Florida quarries as well as other third-party federal quarry permits subject to the litigation. On January 29, 2010, the Corps completed a multi-year review commenced as a result of this litigation and issued a Record of Decision ("ROD") supporting the issuance of new federal quarry permits for the FEC and SCL quarries. Excavation of new aggregates was stopped at the FEC and SCL quarries from January 20, 2009 until new permits were issued. The FEC permit was issued on February 3, 2010, and the SCL permit on February 18, 2010. The ROD also indicated that a number of potential environmental impacts must be addressed at the wetlands located at the Kendall Krome site before a new federal quarry permit may be issued for mining at that quarry. It is unclear how long it will take to fully address the Corps' concerns regarding mining in the Kendall Krome wetlands. While no new aggregates will be quarried from wetland areas at Kendall Krome pending the resolution of the potential environmental issues, the FEC and SCL quarries will continue to operate. If CEMEX Florida is unable to maintain the new Lake Belt permits, CEMEX Florida would need to source aggregates, to the extent available, from other locations in Florida or import aggregates. This would likely affect operating income from our Florida operations. Any adverse impacts on the Florida economy arising from the cessation or significant restriction of quarrying operations in the Lake Belt area could also have a material adverse impact on our results of operations, liquidity and financial condition.

In June 2010, the EPA proposed regulating Coal Combustion Residuals ("CCRs") generated by electric utilities and independent power producers as a hazardous or special waste under the Resource Conservation and Recovery Act. CEMEX uses CCRs as a raw material in the cement manufacturing process, as well as a supplemental cementitious material in some of our ready-mix concrete products. On December 19, 2014, the EPA issued a final rule on the regulation of CCRs (the "Final Rule"). As of March 31, 2017, we expect that the effects of the Final Rule will not have a material adverse impact on our results of operations, liquidity and financial condition.

We are subject to a number of federal and state laws and regulations addressing climate change. On the federal side, EPA has promulgated a series of regulations pertaining to emissions of GHGs from industrial sources. EPA issued the Mandatory Reporting of GHGs Rule, effective December 29, 2009, which requires certain covered sectors, including cement manufacturing, with GHG emissions above an established threshold to inventory and report their GHG emissions annually on a facility-by-facility basis. In 2010, EPA issued a final rule that establishes GHG thresholds for the New Source Review Prevention of Significant Deterioration ("PSD") and Title V Operating Permit programs. The rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain PSD and Title V permits for GHG emissions. Cement production facilities are included within the categories of facilities required to obtain permits, provided that their GHG emissions exceed the thresholds in the tailoring rule. The PSD program requires new major sources of regulated pollutants and major modifications at existing major sources to secure pre-construction permits that establish, among other things, limits on pollutants based on Best Available Control Technology ("BACT"). According to EPA's rules, stationary sources, such as cement manufacturing, which are already regulated under the PSD program for non-GHG pollutants, need to apply for a PSD permit for any GHG emissions increases above 75,000 tons/year of carbon dioxide equivalent ("CO2E"). Therefore, new cement plants and existing plants undergoing modification which are major sources for non-GHG pollutants regulated under the CAA need to acquire a PSD permit for construction or modification activities that increase CO2E by 75,000 or more tons/year, and would have to determine and install BACT controls for those emissions. Furthermore, any new source that emits 100,000 tons/year of CO2E or any existing source that emits 100,000 tons/year of CO2E and undergoes modifications that would increase CO2E emissions by at least 75,000 tons/year, must comply with PSD obligations. Complying with these PSD permitting requirements can involve significant costs and delay. The costs of future GHG-related regulation of our facilities through these efforts or others could have a material economic impact on our U.S. operations and the U.S. cement manufacturing industry.

With respect to state efforts to address climate change, in 2006, the State of California adopted the Global Warming Solutions Act (Assembly Bill 32 or "AB32") setting into law a goal to reduce the State's carbon dioxide emissions to 1990 levels by 2020. As part of the measures derived from AB32, the California Air Resources Board ("CARB") developed a cap-and-trade program, enforced from 2013, that covers most industrial sources of greenhouse gas emissions in the State, including cement production facilities. The program involves allocating a number of allowances free of charge to covered installations, which must subsequently surrender back to the regulator a number of allowances or qualified offset credits matching their verified emissions during the compliance period. Based on the free allowances received for the second compliance period (2015-2017), we expect that our Victorville cement plant will meet all of its compliance obligations for that period without a material impact on its operating costs. Furthermore, we are actively pursuing initiatives to substitute lower carbon fuels for fossil fuels, improve our energy efficiency and utilize renewable power in an effort to economically reduce our direct and indirect GHG emission intensities. However, even with these ongoing efforts and the expected distribution of free allowances, we cannot assure you that the overall costs of complying with a cap-and-trade program will not have a material impact on our operations in California.

In 2007, CARB approved a regulation that requires California equipment owners/operators to reduce diesel particulate and nitrogen oxide emissions from in-use off-road diesel equipment and to meet progressively more restrictive emission targets. In 2008, CARB approved a similar regulation for in-use on-road diesel equipment.

The emission targets requires us to retrofit our California-based equipment with diesel emission control devices or replace equipment with new engine technology in accordance with certain deadlines. As of March 31, 2017, compliance with the CARB regulations has resulted in equipment related expenses or capital investments, including overhauling engines and purchases of new equipment directly related to the CARB regulations, in excess of U.S.\$32.45 million. We may continue to incur substantial expenditures to comply with these requirements.

#### Europe.

#### General overview of EU industrial regulation

In the EU, the cement sector is subject to a range of environmental laws at EU and national EU member state ("Member State") levels. These laws can be very broadly categorized as (1) primary and direct controls placed upon their main operational activities and (2) more general legal regimes which protect different aspects of the environment across many sectors.

The primary examples of the first kind of control are the various laws governing the specific operational activities of the sector, through stringent permitting and emissions controls, which are dealt with in the main sub-section below. Examples of the second, more general, legal controls are the EU Water Framework Directive (2000/60/EC) and the EU Waste Framework Directive (2008/98/EC) which impose various obligations in relation to protection of the surface and underground water environments and the recovery, disposal and overall management of waste. In practice, the applicable substance of even these more general laws tends to filter through to the industry via the direct route of the permitting emissions control systems. However, it is important to recognize that in the EU the sector is subject to a complex web of different environmental protection laws and standards.

The EU legal system also operates in a way different to federal systems. The EU legal regime is what is referred to as "supra-national" law. It sits "above" the legal systems of the different Member States, which retain their independence subject to tight oversight from EU institutions, especially the Court of Justice, the European Commission, and the European Parliament. As such, EU law operates (in its many fields of application, including industrial regulation) in order to "control" and authoritatively interpret the legislation and implementation of law (EU and domestic) in those Member States. One of the key manifestations of this "supra-national control" are the inter-related doctrines of the supremacy of EU law and of conforming interpretation. Essentially, where an area of legal control in a Member State has its origin in an EU Directive, then the Member States must transpose the Directive fully and effectively into their domestic law and every organ of the Member State, including its regulators and its Courts, must interpret (and if necessary change) domestic law in order to conform with the objectives and the letter of the relevant EU Directive. This is of relevance to the cement sector since almost every aspect of its environmental regulation has its origins in EU legislation.

# EU Industrial Permits and Emissions Controls

In the EU, the primary legal environmental controls applied to cement plants have been those EU Directives which control operational activities and emissions from those activities. Until recently, these controls were primarily derived from two EU Directives: (1) the so-called "IPPC Directives" (as described below) and (2) the Incineration Directive (as defined below). On January 6, 2011, the Industrial Emissions Directive (2010/75/EU) ("IED") came into force. The IED recasts seven pieces of existing legislation into a single coherent legislative instrument, including the IPPC Directives and the Incineration Directive, both of which it repeals. With some exceptions, the IED retains the essential substance of the earlier Directives.

The primary EU legislative control over the sector (until the transition between 2010-2014 of the IED) was the Directive on Integrated Pollution Prevention and Control (2008/1/EC) ("IPPC Directive"). The 2008 version of this Directive was in fact an update and consolidation of an earlier Directive first promulgated in 1996. Since

1996, these IPPC Directives have adopted an integrated approach to regulation of various sectors of industrial plant, including cement, by taking into account and controlling/regulating the whole environmental performance of the plant. They required cement works to have a permit which, until recently in England and still in some other states, continues to be referred to as an "IPPC Permit." These permits contain emission limit values and other conditions based on the application of (what was in 1996) a new legal and technical concept called "best available techniques" ("BAT").

The concept of BAT is central to the system, and effectively imposes a legal obligation on plant operators to use and apply the best available techniques (as they develop from time to time) in order to prevent or, where this was not practicable, minimize emissions of pollutants likely to be emitted in significant quantities from the plant to air, water or land. Emission limit values, parameters or equivalent technical measures must be based on the best available techniques, without prescribing the use of one specific technique or technology and taking into consideration the technical characteristics of the installation concerned, its geographical location and local environmental conditions. In all cases the permit conditions must ensure a high level of protection for the environment as a whole.

Permit conditions also had to address energy efficiency, waste minimization, prevention of accidental emissions and site restoration. To assist the permitting authorities and companies in determining the BAT, the European Commission organized an exchange of information between experts from the Member States, industry and environmental organizations. This resulted in the adoption and publication by the European Commission of BAT Reference Documents ("BREFs") for the industry sectors covered by the IPPC Directive. A key element of the BREFs were the conclusions on BAT ("BAT conclusions") which were used as a reference for setting permit conditions. All of these IPPC Directive requirements have been followed through (and in some respects tightened) by the IED.

The second earlier Directive, which was applied in direct control of cement operations, was the EU Waste Incineration Directive (2000/76/EC) ("Incineration Directive") which regulated those parts of the cement operation that used recovered waste materials as substitute fuels in cement kilns. Its aim was to prevent or limit, as far as practicable, negative effects on the environment, in particular pollution by emissions in air, soil, surface water and groundwater and the resulting risks to human health, from incineration and co-incineration plants. Cement and lime kilns as a primary or secondary source of fuel fall within the definition of "co-incineration plants." The Incineration Directive sought to achieve its aim by setting and maintaining stringent operational conditions and technical requirements, as well as emission limit values for a range of pollutants including dust, nitrogen oxides, sulfur dioxide, hydrogen chloride, heavy metals and dioxins. Again, the essential substance of the Incineration Directive has been followed through into the IED.

The IED has applied to new industrial installations since January 7, 2013 and to existing industrial installations (other than large combustion plants) since January 7, 2014. Under the IED, operators of industrial installations, including cement plants, are required to obtain an integrated permit from the relevant permitting authority in the Member States. As with the IPPC Directive, permit conditions, including emission limit values, must be based on BAT and a total of 35 BREFs are being rewritten or revised for the IED. However, there is an important difference between the IPPC Directive and the IED. Under the IPPC Directive, the BREFs were considered as guidance only. This is not the case under the IED. Where BAT conclusions specify emission levels, permitting authorities are required to set emission limit values that do not exceed these levels. They may derogate from this requirement only where the costs associated with the achievement of the emission levels associated with the BAT disproportionately outweigh the environmental benefits due to the geographical location, the local environmental conditions or the technical characteristics of the installation concerned. The permitting authorities must document the reasons for the derogation from the emission limit values in the permit, including the result of the cost-benefit assessment. In April 2013, pursuant to European Commission Decision No. 2013/163/EU, the European Commission published new BAT conclusions under the IED for Production of Cement, Lime and Magnesium Oxide, together with specific emission levels. This document sets out an extensive list of technical requirements for most aspects of the cement manufacture process in the EU, with a

view to prevention and minimization of all polluting emissions. It is a new requirement under the IED that permitting authorities must review and, if necessary, update permit conditions within four years of the European Commission publishing decisions on BAT conclusions for a particular activity. While we are not currently able to assess what impact the IED will have on our operations, it is reasonable to assume that there will be an impact given the change in regulatory approach heralded by the legislation and the fact that it will be key to the permitting of the cement industry in the EU. In particular, the European Commission describes review of the BREFs as a continuing process due to ongoing technological advances and so updates may be expected. This has the potential to require our operations to be adapted to conform to the latest BAT.

As a result of a lawsuit filed by the city of Kaštela against the Ministry of Environment of the Republic of Croatia, the IPPC Permit issued on behalf of CEMEX Croatia by the Ministry of Environment was revoked on July 6, 2015 by a final and non-appealable judgment of a first instance court in Split, Croatia. The judgment required the Ministry of Environment to repeat the procedure for the issuance of a new IPPC Permit. On November 23, 2015, the Ministry of Environment issued a new IPPC Permit, which has been challenged by the city of Kaštela. On January 7, 2016, CEMEX Croatia received the claim and replied to it in due time. The Ministry of Environment also replied to the claim. At a court hearing held on September 14, 2016, the litigation proceedings concluded. On November 18, 2016, the administrative court in Split, Croatia notified CEMEX Croatia that the decision regarding the IPPC Permit was annulled and the matter was remanded to the Ministry of Environment in order to repeat the procedure. On December 2, 2016, CEMEX Croatia and the Ministry of Environment filed an appeal against such judgment. As of March 31, 2017, CEMEX Croatia is awaiting the decision on the appeal. If the IPPC Permit is conclusively annulled, we do not believe that such judgment would have a material adverse impact on our results of operations, liquidity and financial condition.

In addition, in accordance with Article 21(3) of the IED, within four years of BAT conclusion publications, the competent authority is to reconsider and, if necessary, update all permit conditions and ensure that the installation complies with such permit conditions. Accordingly, on January 3, 2017, the Ministry of Environment invited CEMEX Croatia to submit relevant expert opinions in order to update the existing permit conditions and ensure compliance with permit conditions. On March 20, 2017, CEMEX Croatia submitted expert opinions to the Ministry of Environment, and, as of March 31, 2017, CEMEX Croatia had not yet been notified of the decision on the Ministry of Environment's appeal. Should the IPPC Permit be finally annulled, we do not believe that the judgment would have a material adverse impact on our results of operations, liquidity and financial condition. In the meantime, a new permit will be issued in accordance with the IED.

### EU Emissions Trading

In 1997, as part of the United Nations Framework Convention on Climate Change (the "UNFCCC"), the Kyoto Protocol was adopted to limit and reduce GHG emissions. The Kyoto Protocol set legally binding emission reduction targets for 37 industrialized countries and the EU. Under the Kyoto Protocol, industrialized countries agreed to reduce their collective GHG emissions by 5% against 1990 levels over the five year period 2008-2012 ("first commitment period"); future mandatory targets were expected to be established for commitment periods after 2012. To compensate for the sting of binding targets, the Kyoto Protocol allows three "flexibility" mechanisms to be used by parties in meeting their emission limitation commitments: the Clean Development Mechanism ("CDM"), Joint Implementation ("JI") and International Emissions Trading.

In 2012, at the United Nations Climate Change Conference in Doha, Qatar, the Doha Amendment to the Kyoto Protocol was adopted. Certain parties, including the UK and the EU, committed to reduce GHG emissions by at least 18% below 1990 levels in the eight year period from 2013 to 2020 ("second commitment period").

Our operations in the United Kingdom, Spain, Germany, Latvia, Poland, Croatia (since 2013) and Czech Republic, are subject to binding caps on CO2 emissions imposed pursuant to the EU's emissions trading system ("ETS") that was established by Directive 2003/87/EC to implement the Kyoto Protocol. Under the ETS, a cap or limit is set on the total amount of CO2 emissions that can be emitted by the power plants, energy-intensive

installations (including cement plants) and commercial airlines that are covered by the system. The cap is reduced over time, so that the total amount of emissions will decrease. Within the cap, companies receive or buy emission allowances. These allowances are tradable so as to enable companies that manage to reduce their emissions to sell their excess allowances to companies that are not reaching their emissions objectives. After each year, a company must surrender enough carbon allowances to cover all its emissions. Failure to meet the emissions caps is subject to significant monetary penalties.

In addition to carbon allowances, the ETS also allows the use of Kyoto Protocol units: the Emission Reduction Unit, representing a metric ton of carbon saved by a project under the JI mechanism, and the Certified Emission Reduction unit ("CERs") under the CDM. The ETS recognizes these units as equivalent to its carbon allowances and allows them to be used by companies for compliance up to a certain limit to offset their carbon emissions in the EU. We have registered 19 CDM projects with a total potential to reduce approximately 2.44 million tons of CO2E emissions per year. The corresponding CERs from these projects could be used for internal purposes or sold to third parties. Croatia, as a new entrant, has a right to use only 4.5% of its verified carbon emissions in relation to other EU ETS members which have a right to use up to 11% of their free allocation of EU allowances.

The ETS consists of three trading phases: Phase I which lasted from January 1, 2005 to December 31, 2007, Phase II, which lasted from January 1, 2007 to December 31, 2012, and was intended to meet commitments under the Kyoto first commitment period, and Phase III which commenced on January 1, 2013 and will end on December 31, 2020. For Phase III of the ETS there is also a cap on nitrous oxide and perfluorocarbons (PFC) emissions. Prior to the commencement of each of ETS Phases I and II, each Member State was responsible for publishing its National Allocation Plan ("NAP"), a document which sets out a national cap on the total amount of carbon emissions by all installations during each relevant trading phase and the methodology by which the cap would be allocated to the different sectors in the ETS and their respective installations. Each Member State's cap contributed to an overall EU cap on emissions, where one carbon allowance must be surrendered to account for one metric ton of carbon emitted. The carbon allowances were mostly distributed for free by each Member State to its ETS installations, although some Member States also used a fraction of their material cap for auctioning, mainly to power generators. Under ETS Phase III, however, the system of NAPs has been replaced by a single EU-wide, top-down, cap on CO2 emissions, with allocation for all installations made according to harmonized EU rules and set out in each Member State's National Implementation Measures ("NIM"). Additional restrictions have been introduced on the extent to which Kyoto Protocol units can be used to offset EU carbon emissions, and auctioning, not free allocation, has become the default method for distributing allowances. For those allowances that are still given away free, as discussed below, harmonized rules apply based on EU-wide benchmarks of emissions performance.

EU policymakers see the free allocation of allowances as a principle way to reduce the risk of carbon leakage—that is, the risk that energy-intensive industries, facing higher costs because of the ETS, will move their facilities beyond the EU's borders to countries that do not have climate change controls, thus resulting in a leakage of CO2 emissions without any environmental benefits. In 2009, a list of ETS sectors deemed to be at significant risk of carbon leakage was formally adopted by the European Commission, following agreement by Member States and the European Parliament. The list which was valid from 2010 to 2014 included the cement production sector, on the basis that the additional costs imposed by the ETS would lead to a 30% or more increase in production costs as a proportion of the "gross value added." A decision on the list of sectors deemed to be at significant risk of carbon leakage for the period 2015-2019 was adopted by the European Commission on October 29, 2014 and the cement production sector resulted selected again. Sectors classified as deemed to be at significant risk of carbon leakage will continue to receive 100% of their benchmark allocation of allowances free of charge during Phase III, adjusted by a cross-sectoral correction factor that is being applied uniformly upon all participating facilities in Europe in order to reduce the amount of free allocation that each installation so that the total sum does not exceed the authorized EU-wide cap for free allocation. By contrast, sectors that are not considered at risk of carbon leakage received 80% of their benchmark allowances for free in 2013, declining to 30% by 2020.

On April 27, 2011, the European Commission adopted Decision 2011/278/EU that states the rules, including the benchmarks of greenhouse gas emissions performance, to be used by the Member States in calculating the number of allowances to be annually allocated for free to industrial sectors (such as cement) that are deemed to be exposed to the risk of "carbon leakage." The number of allowances to be allocated to installations for free will be based on a combination of historic activity levels at that installation and an EU benchmark of carbon efficiency for the production of a particular product—for example, clinker. An installation's historic activity level is calculated by taking the median of its annual production levels during the baseline period, either 2005 to 2008 or, where historic activity levels are higher, 2009/10. The product benchmark is based on the average carbon emissions of the top 10% most "carbon efficient" EU installations for a particular product during 2007/8, where carbon efficiency is measured by carbon intensity or carbon emission per metric ton of product. Preliminary allocation calculations based on the rules were carried out by each Member State and included in a NIM table which was sent for scrutiny to the European Commission. On September 5, 2013, the European Commission adopted Decision 2013/448/EU which approved the NIMs submitted by most Member States and which sets the annual cross-sectoral correction factors for the period 2013-2020. The cross-sectoral correction figure will be used to adjust the levels of product benchmarks used to calculate the free allocation of allowances to each installation. This is to ensure that the total amount handed out for free does not exceed the maximum set in the ETS Directive. Each Member State is required to adjust its national allocation table of free allowances each year and submit this for approval to the European Commission prior to issuing allowances. The application of this cross-sectoral correction factor results in an important decrease in the quantity of allowances that our ETS-participant operations expect to receive for free in the 2013-2020 period.

On February 26, 2014, the European Commission adopted a Decision on national allocation allowances for the last group of Member States including Croatia, which was granted 5.56 million of free allowances. Since this time, a regularly updated allocation table showing the number of allowances that have been allocated per Member State is published on the European Commission's website. Based on the European Commission approved NIMs that were published in the first quarter of 2014 for Phase III, we expect that the aggregate amount of allowances that will be annually allocated for free to CEMEX in Phase III of the ETS will be sufficient to operate. An important factor in providing such assurance is the European Commission Decision 2014/746/EU (which took effect on January 1, 2015) which, as mentioned, included the manufacture of cement as an industry at significant risk of carbon leakage meaning that the industry will continue to receive 100% of its benchmark allocation of allowances free of charge during Phase III. Although the European Council has indicated that the free allocation of allowances to carbon leakage sectors will continue beyond Phase III, a future decision that the cement industry should no longer be regarded as at significant risk of carbon leakage could have a material impact on our operations and our results of operations, liquidity and financial condition.

An installation can only receive its full allocation of free allowances if it is deemed to have not partially ceased under the "partial cessation rule" of the ETS. Partial cessation applies where a sub-installation which contributes at least 30% of the installation's final annual amount of emissions allocated, or contributes to more than 50,000 allowances, reduces its activity level by at least 50% of its historic activity levels. If activity levels are reduced to between 50% and 75% of the historic activity level, the amount of free carbon allowances the sub-installation will receive will reduce by half in the following year; if activity levels are reduced by 75% to 90% compared to historic activity levels, the amount of free carbon allowances the sub-installation will receive will reduce by 75% in the following year; and if activity levels are reduced by 90% or more compared to historic activity levels, no allowances shall be allocated free of charge the following year with respect to the sub-installation concerned. This represents a change from ETS Phase II, in which the rules for partial cessation were defined by each Member State's NAP and often did not result in any reduction in the level of free allocation, but an installation was no longer entitled to a free allocation from the following year if it had permanently ceased operating. The new rules are therefore more stringent, and to the extent that they result in our plants foregoing free carbon allowances, they could represent a significant loss of revenue to us, since carbon allowances are also tradable.

Despite having sold a substantial amount of allowances during Phase II of the ETS, as mentioned, we believe that the aggregate amount of allowances that will be annually allocated for free to CEMEX in Phase III of the ETS (2013-2020) will be sufficient to operate. This assessment stems from various factors, notably our efforts to reduce emissions per unit of clinker produced, the stream of offset credits coming from our internal portfolio of CDM projects and our expected long position in the initial years of Phase III of the ETS. We are taking measures intended to minimize our exposure to this market, while continuing to supply our products to our customers. It is not possible to predict with any certainty at this stage how CEMEX will be affected by potential reform to the EU ETS in Phase IV. However, the European Council has indicated that the EU-wide overall cap on emission allowances will be reduced by 2.2% every year from 2021, that benchmarks will be updated based on recent data and that a more dynamic allocation based on recent production shall replace the "historical activity level." These modifications, which are still subject to final approval by EU institutions (presumably during 2017), suggest that there may be fewer allowances available with respect to our operations in the future.

#### Landfills

In Great Britain, future expenditure on closed and current landfill sites has been assessed and quantified over the period in which the sites are considered to have the potential to cause environmental harm, generally consistent with the regulatory view of up to 60 years from the date of closure. The assessed expenditure relates to the costs of monitoring the sites and the installation, repair and renewal of environmental infrastructure. The costs have been quantified on a net present value basis in the amount of approximately £131.0 million (approximately U.S.\$164.14 million as of March 31, 2017, based on an exchange rate of £0.7981 to U.S.\$1.00) as of March 31, 2017, and we made an accounting provision for this amount at March 31, 2017.

### Colombian Water Use Litigation

On June 5, 2010, the District of Bogotá's Environmental Secretary (Secretaría Distrital de Ambiente de Bogotá) (the "Environmental Secretary") issued a temporary injunction suspending all mining activities at CEMEX Colombia's El Tunjuelo quarry, located in Bogotá, Colombia. As part of the temporary injunction, Holcim Colombia and Fundación San Antonio (local aggregates producers that also have mining activities located in the same area as the El Tunjuelo quarry) were ordered to suspend mining activities in that area. The Environmental Secretary alleged that during the past 60 years, CEMEX Colombia and the other companies illegally changed the course of the Tunjuelo River, used the percolating waters without permission and improperly used the edge of the river for mining activities. In connection with the temporary injunction, in June 2010, the Environmental Secretary initiated proceedings to impose fines against CEMEX Colombia. CEMEX Colombia has requested that the temporary injunction be revoked, arguing that its mining activities are supported by all authorizations required pursuant to the applicable environmental laws and that all the environmental impact statements submitted by CEMEX Colombia have been reviewed and authorized by the Ministry of Environment and Sustainable Development (Ministerio de Ambiente y Desarrollo Sostenible). On June 11, 2010, the local authorities in Bogotá, in compliance with the Environmental Secretary's decision, sealed off the mine to machinery and prohibited the extraction of CEMEX Colombia's aggregates inventory. Although there is not an official quantification of the possible fine, the Environmental Secretary has publicly declared that the fine could be as much as 300 billion Colombian Pesos (approximately U.S.\$104.16 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). The temporary injunction does not currently compromise the production and supply of ready-mix concrete to any of our clients in Colombia. At this stage, as of March 31, 2017, we are not able to assess the likelihood of an adverse result, but if adversely resolved, it could have a material adverse impact on our results of operations, liquidity and financial condition.

#### **Tariffs**

The following is a discussion of tariffs on imported cement in our major markets.

*Mexico*. Mexican tariffs on imported goods vary by product and have historically been as high as 100%. Over the years, import tariffs have been substantially reduced and currently range from none at all for raw

materials to over 20% for finished products. As a result of NAFTA, as of January 1, 1998, the tariff on cement imported into Mexico from the United States or Canada was eliminated. While the lack of existence or reduction in tariffs could lead to increased competition from imports in our Mexican markets, it is possible that other factors, such as that the cost of transportation incurred from most producers outside Mexico to central Mexico, traditionally the region of highest demand in Mexico, could be seen as a barrier to enter certain of the regions in Mexico in which we operate.

United States. Cement imported into the United States from Cuba and North Korea is subject to custom duties depending on the specific type of cement. Imports into the United States from Cuba and North Korea are generally prohibited due to the U.S. import/export controls and economic sanctions. In order to import cement and other products into the United States from Cuba or North Korea, an importer would be required to obtain a license from the U.S. government or otherwise establish the existence of a license exception.

Cement imports from countries other than Cuba and North Korea into the United States are currently duty free, however, certain individuals and entities on U.S. government lists of specially designated nationals and prohibited parties, may be subject to U.S. import/export controls and other sanctions that prohibit transactions (including import transactions) with such persons without a license.

*Europe*. Member countries of the EU are subject to the uniform EU commercial policy. There is no tariff on cement imported into a country that is a member of the EU from another member country or on cement exported from an EU country to another member country. As of March 31, 2017, for cement imported into a member country from a non-member country, the tariff was 1.7% of the customs value. Any country with preferential treatment with the EU is subject to the same tariffs as members of the EU. Most Eastern European producers exporting cement into EU countries currently pay no tariff.

#### Tax Matters

Mexico. In November 2009, the Mexican Congress approved a general tax reform, effective as of January 1, 2010 (the "2010 Tax Reform"). Specifically, the 2010 Tax Reform included changes to the tax consolidation regime that required CEMEX, among others, to determine and retroactively pay taxes at a current rate on items in past years that were eliminated in consolidation or that reduced consolidated taxable income ("Additional Consolidated Taxes"). The 2010 Tax Reform required CEMEX to pay taxes on certain previously exempted intercompany dividends, certain other special tax items and operating losses generated by members of the consolidated tax group not recovered by the individual company generating such losses within the succeeding ten-year period. The 2010 Tax Reform also increased the statutory income tax rate from 28% to 30% for the years 2010 to 2012, then lowered it to 29% for 2013 and 28% for 2014 and future years. However, in December of 2012, the Federal Revenue Law (Ley de Ingresos de la Federación), applicable in 2013, established that the statutory income tax rate would remain at 30% in 2013, and thereafter lowered to 29% for 2014 and 28% for 2015 and future years. As per the tax reforms enacted for 2014, the statutory income tax will remain at 30%.

For the 2010 fiscal year, CEMEX was required to pay (at the new, 30% tax rate) 25% of the Additional Consolidated Taxes for the period between 1999 and 2004, with the remaining 75% payable as follows: 25% in 2011, 20% in 2012, 15% in 2013 and 15% in 2014. Additional Consolidated Taxes arising after the 2004 tax year are taken into account in the sixth fiscal year after such year and are payable over the succeeding five years in the same proportions (25%, 25%, 20%, 15% and 15%). Applicable taxes payable as a result of this tax reform are increased by inflation adjustments as required by the Mexican Income Tax Law (*Ley del Impuesto Sobre la Renta*). In connection with these changes in the tax consolidation regime in Mexico, as of December 31, 2009, we recognized a liability of approximately Ps10.5 billion (approximately U.S.\$560.60 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00), of which approximately Ps8.2 billion (approximately U.S.\$437.80 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) was recognized under "Other non-current assets" in connection with the net liability recognized under the new tax law and that we expect to realize in connection with the payment of this tax liability, and approximately Ps2.2 billion

(approximately U.S.\$117.46 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) was recognized against "Retained earnings" upon adoption of IFRS according to the new law, related to: (a) the difference between the sum of the equity of the controlled entities for tax purposes and the equity for tax purposes of the consolidated entity, (b) dividends from the controlled entities for tax purposes to CEMEX, S.A.B. de C.V., and (c) other transactions among the companies included in the tax consolidation group that represented the transfer of resources within such group.

On June 30, 2010, CEMEX paid approximately Ps325 million (approximately U.S.\$17.35 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) of Additional Consolidated Taxes. This first payment represented 25% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004. On March 31, 2011, CEMEX made a second payment of approximately Ps506 million (approximately U.S.\$27.02 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This second payment, together with the prior payment, represented 50% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, and also included the first payment of 25% of the Additional Consolidated Taxes for the period that corresponds to 2005. On March 30, 2012, CEMEX paid Ps698 million (approximately U.S.\$37.27 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This third payment, together with the two prior payments, represented 70% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, 50% of the Additional Consolidated Taxes for the period that corresponds to 2005 and it also included the first payment of 25% of the Additional Consolidated Taxes for the period that corresponds to 2006. On March 27, 2013, CEMEX paid Ps2 billion (approximately U.S.\$106.78 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This fourth payment, together with the three prior payments, represented 85% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, 70% of the Additional Consolidated Taxes for the period that corresponds to 2005, 50% of the Additional Consolidated Taxes for the period that corresponds to 2006 and 25% of the Additional Consolidated Taxes for the period that corresponds to 2007. On March 31, 2014, CEMEX paid Ps2 billion (approximately U.S.\$96.53 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This fifth payment, together with the four prior payments, represented 100% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, 85% of the Additional Consolidated Taxes for the period that corresponds to 2005, 70% of the Additional Consolidated Taxes for the period that corresponds to 2006 and 50% of the Additional Consolidated Taxes for the period that corresponds to 2007. On March 31, 2015, CEMEX paid Ps1.5 billion (approximately U.S.\$80.09 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This sixth payment, together with the five prior payments, represented 100% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, 100% of the Additional Consolidated Taxes for the period that corresponds to 2005, 85% of the Additional Consolidated Taxes for the period that corresponds to 2006 and 70% of the Additional Consolidated Taxes for the period that corresponds to 2007. On March 31, 2016, CEMEX paid Ps119 million (approximately U.S.\$6.35 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This seventh payment, together with the six prior payments, represented 100% of the Additional Consolidated Taxes for the period that includes from 1999 to 2004, 100% of the Additional Consolidated Taxes for the period that corresponds to 2005, 100% of the Additional Consolidated Taxes for the period that corresponds to 2006 and 85% of the Additional Consolidated Taxes for the period that corresponds to 2007. On March 31, 2017, CEMEX paid Ps38 million (approximately U.S.\$2.06 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This eighth payment, together with the seven prior payments, represented 100% of the Additional Consolidated Taxes for the period from 1999 to 2004, 100% of the Additional Consolidates Taxes for the period that corresponds to 2005, 100% of the Additional Consolidated Taxes for the period that corresponds to 2006 and 100% of the Additional Consolidated Taxes for the period that corresponds to 2007. As of March 31, 2017, we have paid an aggregate amount of approximately Ps7.3 billion (approximately U.S.\$389.74 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) of Additional Consolidated Taxes.

In December 2010, pursuant to certain additional rules, the tax authorities granted the option to defer the calculation and payment of certain items included in the law in connection with the taxable amount for the difference between the sum of the equity of controlled entities for tax purposes and the equity of the consolidated

entity for tax purposes. As a result, CEMEX reduced its estimated tax payable by approximately Ps2.9 billion (approximately U.S.\$154.83 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) against a credit to the income statement when the new tax enactment took place. In addition, after accounting for the following that took place in 2010: (a) cash payments, (b) income tax from subsidiaries paid to the parent company, and (c) other adjustments, the estimated tax payable for tax consolidation in Mexico amounted to approximately Ps10.1 billion (approximately U.S.\$539.24 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) as of December 31, 2010. Furthermore, after accounting for the following that took place in 2011: (a) cash payments, (b) income tax from subsidiaries paid to the parent company, and (c) other adjustments, the estimated tax payable for tax consolidation in Mexico increased to approximately Ps12.4 billion (approximately U.S.\$662.04 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) as of December 31, 2011. Additionally, after accounting for the following that took place in 2012: (a) cash payments, (b) income tax from the subsidiaries paid to the parent company, and (c) other adjustments, as of December 31, 2012, the estimated tax payable for tax consolidation in Mexico increased to approximately Ps14.5 billion (approximately U.S.\$774.16 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). Furthermore, after accounting for the following that took place in 2013: (a) cash payments, (b) income tax from subsidiaries paid to the parent company, (c) other adjustments, and (d) effects of tax deconsolidation, as of December 31, 2013, the estimated tax payable for tax consolidation in Mexico increased to approximately Ps24.8 billion (approximately U.S.\$1.32 billion as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). Additionally, after accounting for the following that took place in 2014: (a) payments, the majority of which were in cash, and (b) other adjustments, as of December 31, 2014, the estimated tax payable for tax consolidation in Mexico decreased to approximately Ps21.4 billion (approximately U.S.\$1.14 billion as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). Additionally, after accounting for the following that took place in 2015 and after giving effect to the 2016 Tax Reform (as defined below), as a result of: (a) payments made during the period, the tax payable for tax consolidation in Mexico was decreased to approximately Ps16.2 billion (approximately U.S.\$864.92 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00), which after the application of (b) different tax credits, and (c) assets for tax loss carryforwards worth, before discount, approximately Ps11.9 billion (approximately U.S.\$635.34 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00), as of December 31, 2015, the estimated tax payable for tax consolidation in Mexico further decreased to approximately Ps3.9 billion (approximately U.S.\$208.22 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). Additionally, after accounting for the following that took place in 2016: (a) cash payments, and (b) other adjustments, as of December 31, 2016, the estimated tax payable for tax consolidation in Mexico decreased to approximately Ps3.2 billion (approximately U.S.\$170.84 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00).

In addition, as a result of the enactment of the new Income Tax Law (*Ley del Impuesto Sobre la Renta*) in Mexico approved in December 2013 and effective beginning January 1, 2014 (the "2014 Tax Reform"), the statutory income tax rate for 2014 will remain at 30%, and the tax consolidation regime that was in effect up until December 31, 2013, was replaced prospectively by a new integration regime, to which CEMEX will not apply. In consequence, as of 2014, each company in Mexico will determine its income taxes based solely in its individual results, and a period of up to ten years has been established for the settlement of the liability for income taxes related to the tax consolidation regime accrued until December 31, 2013 ("Deconsolidation Taxes").

On February 12, 2014, we filed a constitutional challenge (*juicio de amparo*) against the 2014 Tax Reform that abrogated the tax consolidation regime. The purpose of the challenge was to obtain certainty in the applicable statutory rules in order to assess and pay the tax liability derived from such reform according to constitutional principles. On February 26, 2016, we withdrew the constitutional challenge (*juicio de amparo*).

On April 30, 2014, CEMEX paid Ps2.3 billion (approximately U.S.\$122.80 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). From this amount, Ps987 million (approximately U.S.\$52.70 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) were paid in cash and Ps1.3 billion (approximately U.S.\$70.76 million as of March 31, 2017, based on an exchange rate of Ps18.73

to U.S.\$1.00) were paid through the application of a tax credit, which represented approximately 25% of the Deconsolidation Taxes for the period that corresponded to the 2008 tax year. On April 30, 2015, CEMEX paid Ps3.7 billion (approximately U.S.\$197.54 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). From this amount, Ps2.3 billion (approximately U.S.\$122.80 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) were paid in cash and Ps1.4 billion (approximately U.S.\$74.75 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) were paid through the application of a tax credit. This second payment, together with the first payment, represented 50% of the Deconsolidation Taxes for the period that corresponds to the 2008 tax year and 25% of the Deconsolidation Taxes for the period that corresponds to the 2009 tax year. On April 29, 2016, CEMEX paid Ps728 million (approximately U.S.\$38.87 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00). This third payment, together with the two prior payments, represented 70% of the Deconsolidation Taxes for the period that corresponds to the 2008 tax year, 50% of the Deconsolidation Taxes for the period that corresponds to the 2008 tax year, 50% of the Deconsolidation Taxes for the period to the 2009 tax year and 25% of the Deconsolidation Taxes for the period to the 2009 tax year and 25% of the Deconsolidation Taxes for the period to the 2010 tax year.

In October 2015, the Mexican Congress approved a tax reform, effective as of January 1, 2016 (the "2016 Tax Reform"). Specifically, the 2016 Tax Reform granted Mexican companies two tax credits to offset part of the Deconsolidation Taxes payable as a result of the elimination of the group taxation regime: (a) 50% of the taxes due as a result of unamortized losses used to compute the consolidated tax could be settled with individual accumulated losses adjusted for inflation using a factor of .15 multiplied by such losses, and (b) tax credit against Deconsolidation Taxes related to intercompany dividends that were paid without having sufficient tax profits. CEMEX applied both tax credits against its remaining Deconsolidation Taxes through the filing of amended tax returns regarding the year ending on December 31, 2015 and upon the withdrawal of the constitutional challenge (juicio de amparo) against the 2014 Tax Reform filed by us on February 12, 2015. Additionally, the 2016 Tax Reform granted Mexican companies the option not to pay the remaining asset tax payments included in the Deconsolidation Tax liability. CEMEX also applied this option.

As of March 31, 2017, taking into account the effects of the 2016 Tax Reform, our estimated payment schedule of Deconsolidation Taxes (which includes the Additional Consolidated Taxes) is as follows: approximately Ps898 million (approximately U.S.\$47.94 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) in 2017; approximately Ps897 million (approximately U.S.\$47.89 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) in 2018; and approximately Ps1.4 billion (approximately U.S.\$74.76 million as of March 31, 2017, based on an exchange rate of Ps18.73 to U.S.\$1.00) in 2019 and thereafter.

United States. As of March 31, 2017, the Internal Revenue Service ("IRS") concluded its audit for the year 2014. The final findings did not alter the originally filed CEMEX return, which had no reserves set aside for any potential tax issues. On April 24, 2015 and May 18, 2016, the IRS commenced its audit of the 2015 and 2016 tax year, respectively, under the Compliance Assurance Process. We have not identified any material audit issues and, as such, no reserves are recorded for either the 2015 or the 2016 audit in our financial statements.

Colombia. On April 1, 2011, the Colombian Tax Authority notified CEMEX Colombia of a proceeding notice in which the Colombian Tax Authority rejected certain deductions taken by CEMEX Colombia in its 2009 year-end tax return. The Colombian Tax Authority assessed an increase in taxes to be paid by CEMEX Colombia in the amount of approximately 90 billion Colombian Pesos (approximately U.S.\$31.24 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00) and imposed a penalty in the amount of approximately 144 billion Colombian Pesos (approximately U.S.\$39.58 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). The Colombian Tax Authority argues that certain expenses are not deductible for fiscal purposes because they are not linked to direct revenues recorded in the same fiscal year, without taking into consideration that future revenue will be taxed with income tax in Colombia. CEMEX Colombia responded to the proceeding notice on June 25, 2011. On December 15, 2011, the Colombian Tax Authority issued its final determination, which confirmed the information in the special proceeding. CEMEX Colombia appealed the final determination on February 15, 2012. On January 17, 2013, the

Colombian Tax Authority notified CEMEX Colombia of the resolution confirming the official liquidation. CEMEX Colombia appealed the final determination on May 10, 2013 which was admitted on June 21, 2013. On July 3, 2013, the appeal was notified to the Colombian Tax Authority, and hearings took place on February 18, 2014 and March 11, 2014. An adverse resolution to the appeal was notified to CEMEX Colombia on July 14, 2014 and on July 22, 2014, CEMEX Colombia filed an appeal before the Colombian *Consejo de Estado* against such adverse resolution. At this stage of the proceeding, as of March 31, 2017, we are not able to assess the likelihood of an adverse result in this special proceeding, but if adversely resolved, they could have a material adverse impact on our results of operations, liquidity and financial condition.

Spain. On July 7, 2011, the tax authorities in Spain notified CEMEX España of a tax audit process in Spain covering the tax years from and including 2006 to 2009. The tax authorities in Spain have challenged part of the tax losses reported by CEMEX España for such years. CEMEX España has been formally notified of fines in the aggregate amount of approximately €456 million (approximately U.S.\$486.14 million as of March 31, 2017, based on an exchange rate of €0.9380 to U.S.\$1.00) resulting from the July 7, 2011 tax audit process in Spain. The laws of Spain provide a number of appeals that can be filed against such fines without CEMEX España having to make any payment until such appeals are finally resolved. On April 22, 2014, CEMEX España filed appeals against such fines. At this stage, as of March 31, 2017, we are not able to assess the likelihood of an adverse result regarding this matter, and the appeals that CEMEX España has filed could take an extended amount of time to be resolved, but if all appeals filed by CEMEX España are adversely resolved, it could have a material adverse impact on our results of operations, liquidity and financial condition.

Egypt. On February 9, 2014, ACC was notified of the decision of the Egyptian Ministry of Finance's Appeals Committee (the "Appeals Committee") pursuant to which ACC has been required to pay a development levy on clay (the "Levy on Clay") applied to the Egyptian cement industry in the amount of: (i) approximately 322 million Egyptian Pounds (approximately U.S.\$17.75 million as of March 31, 2017, based on an exchange rate of Egyptian Pounds 18.1358 to U.S.\$1.00) for the period from May 5, 2008 to August 31, 2011; and (ii) approximately 50,235 Egyptian Pounds (approximately U.S.\$2,769.94 as of March 31, 2017, based on an exchange rate of Egyptian Pounds 18.1358 to U.S.\$1.00) for the period from September 1, 2011 to November 30, 2011. On March 10, 2014, ACC filed a claim before the North Cairo Court requesting the nullification of the Appeals Committee's decision and requesting that the North Cairo Court rule that the Egyptian tax authority is not entitled to require payment of the aforementioned amounts. In parallel, ACC has filed a request before the Ministerial Committee for Resolution of Investment Disputes (the "Ministerial Committee") claiming non-entitlement of the Egyptian tax authority to the Levy on Clay used in the production of cement from the date of enforceability of Law No. 114/2008 up until issuance of Law No. 73/2010, and from cement produced using imported clinker. On September 28, 2015, ACC was notified by the Egyptian Cabinet that on September 2, 2015, it ratified an August 10, 2015 decision by the Ministerial Committee (the "Ministerial Committee's Decision") pursuant to which the Egyptian tax authority is instructed to cease claiming payment of the Levy on Clay from ACC. The Ministerial Committee's Decision applies to the years from 2008 up to the issuance date of Law No. 73/2010. It was further decided that the Levy on Clay should not be imposed on imported clinker. At this stage, as of March 31, 2017, the Ministerial Committee's Decision strongly supports ACC's position in this dispute, given the fact that the Ministerial Committee's Decision is legally binding on the Egyptian tax authority. The Ministerial Committee's Decision was submitted to the Egyptian tax authority and, accordingly, the Egyptian tax authority issued a settlement memorandum (the "Settlement Memorandum"), whereby it confirmed and recognized the Ministerial Committee's Decision. Furthermore, in application of the Settlement Memorandum and the Ministerial Committee's Decision, the Egyptian tax authority issued a new claim to ACC for an adjusted amount of 55,586 Egyptian Pounds (approximately U.S.\$3,064.99 as of March 31, 2017, based on an exchange rate of Egyptian Pounds 18.1358 to U.S.\$1.00). On a March 7, 2016 session of the North Cairo Court, ACC submitted the Settlement Memorandum and the Ministerial Committee's Decision. At a May 28, 2016 session before the North Cairo Court, the expert's office appointed to review the case file submitted its report that confirmed and recognized the Ministerial Committee's Decision and at this session this case was reviewed jointly with the Egyptian tax authority case which was filed to challenge ACC's right to cancel the Levy on Clay. The North Cairo Court adjourned the jointly reviewed cases to June 25, 2016. These cases were

thereafter re-adjourned to July 30, 2016 for submission of documents by the attorney for the State pertaining to the settlement of the dispute with ACC. At the session of July 30, 2016, the two cases were adjourned first to September 19, 2016, and afterwards to October 10, 2016 and December 27, 2016 for the foregoing reason. On December 27, 2016, the North Cairo Court ruled for referring the two jointly reviewed cases to the Cairo Administrative Judiciary Court for the former's lack of jurisdiction to review the same. As of March 31, 2017, no session has yet been scheduled before the Cairo Administrative Judiciary Court in order to review the two referred cases. We do not expect that such referral will prejudice ACC's favorable legal position in this dispute. As of March 31, 2017, we do not expect our operations, liquidity and financial condition to suffer a material adverse impact because of this matter.

# Other Legal Proceedings

Colombian Construction Claims. On August 5, 2005, the Urban Development Institute (Instituto de Desarrollo Urbano) ("UDI"), and an individual filed a lawsuit in the Fourth Anti-Corruption Court of Bogotá (Fiscalía Cuarta Anticorrupción de Bogotá) against a subsidiary of CEMEX Colombia claiming that it was liable, along with the other members of the Asociación Colombiana de Productores de Concreto ("ASOCRETO"), an association formed by the ready-mix concrete producers in Colombia, for the premature distress of the concrete slabs of the Autopista Norte trunk line of the TransMilenio bus rapid transit system of Bogotá in which ready-mix concrete and flowable fill supplied by CEMEX Colombia and other ASOCRETO members was used. The plaintiffs alleged that the base material supplied for the road construction failed to meet the quality standards offered by CEMEX Colombia and the other ASOCRETO members and/or that they provided insufficient or inaccurate information in connection with the product. The plaintiffs were seeking the repair of the concrete slabs in a manner which guarantees their service during the 20-year period for which they were originally designed, and estimate that the cost of such repair could have been approximately 100 billion Colombian Pesos (approximately U.S.\$34.72 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). The lawsuit was filed within the context of a criminal investigation against a former director and two officers of the UDI, the contractor, the inspector and two ASOCRETO officers. On January 21, 2008, a court issued an order, sequestering the El Tunjuelo quarry, as security for payment of a possible future money judgment against CEMEX Colombia. The court determined that in order to lift this attachment and prevent further attachments, CEMEX Colombia was required to deposit 337.8 billion Colombian Pesos (approximately U.S.\$117.28 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00) in cash instead of posting an insurance policy to secure such recovery. CEMEX Colombia appealed this decision and the Superior Court of Bogotá (Tribunal Superior de Bogotá) allowed CEMEX to present an insurance policy in the amount of 20 billion Colombian Pesos (approximately U.S.\$6.94 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). CEMEX gave the aforementioned security and, on July 27, 2009, the court lifted the attachment on the quarry.

On October 10, 2012 the court issued a first instance judgment pursuant to which the accusation made against the ASOCRETO officers was nullified. The judgment also convicted a former UDI director, the contractor's legal representatives and the inspector to a prison term of 85 months and a fine of 32 million Colombian Pesos (approximately U.S.\$11,110.19 as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). As a consequence of the nullification, the judge ordered a restart of the proceeding against the ASOCRETO officers. The UDI and other parties to the legal proceeding appealed the first instance judgment and on August 30, 2013 the Superior Court of Bogotá resolved to reduce the prison term imposed to the former UDI director and the UDI officers to 60 months and imposed a fine equivalent to 8.8 million Colombian Pesos (approximately U.S.\$3,055.30 as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00). Additionally, the UDI officers were sentenced to severally pay the amount of 108,000 million Colombian Pesos (approximately U.S.\$37.50 million as of March 31, 2017, based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00) for the purported damages in the concrete slabs of the TransMilenio bus rapid transit system. Additionally, the Superior Court of Bogotá overturned the penalty imposed to the contractor's legal representatives and inspector because the criminal action against them was time barred. Furthermore, the Superior Court of Bogotá revoked the annulment in favor of the ASOCRETO officers

and ordered the first instance judge to render a judgment regarding the ASOCRETO officers' liability or lack thereof. On June 25, 2014, the Supreme Court of Colombia's Penal Cassation Chamber (Sala de Casación Penal de la Corte Suprema de Justicia de Colombia) dismissed the cassation claim filed by the former UDI director and the UDI officers against the Superior Court of Bogotá's judgment. Dismissal of the cassation claim has no effect on CEMEX Colombia's or the ASOCRETO officers' interests in these proceedings. On January 21, 2015, the Penal Circuit Court of Bogotá issued a resolution agreeing with the arguments presented by CEMEX Colombia regarding the application of the statute of limitations to the criminal investigation against the ASOCRETO officers and acknowledging that the ASOCRETO officers were not public officers, and as a consequence, finalizing the process against the ASOCRETO officers and the civil responsibility claim against CEMEX Colombia. On July 28, 2015, the Superior Court of Bogotá (Tribunal Superior de Bogotá) upheld this resolution and as such the action brought against CEMEX Colombia for the premature distress of the concrete slabs of the Autopista Norte trunk line has ended. In addition, six legal actions related to the premature distress of the concrete slabs of the Autopista Norte trunk line of the TransMilenio bus rapid transit system were brought against CEMEX Colombia. The Cundinamarca Administrative Court (Tribunal Administrativo de Cundinamarca) nullified five of these actions and, as of March 31,2017, only one remains outstanding. In addition, the UDI filed another action alleging that CEMEX Colombia made misleading advertisements on the characteristics of the flowable fill used in the construction of the concrete slabs. CEMEX Colombia participated in this project solely and exclusively as supplier of the ready-mix concrete and flowable fill, which were delivered and received to the satisfaction of the contractor, complying with all the required technical specifications. CEMEX Colombia neither participated in nor had any responsibility on the design, sourcing of materials or their corresponding technical specifications or construction. On May 24, 2016, the Civil Court of Bogota settled the action filed by the UDI against CEMEX Colombia. The court accepts the arguments in defense of CEMEX Colombia, ruling that the flowable fill is not what caused the damage to the slabs and that the damages were caused by design changes when executing the road without consulting the original designer and the lack of drains. The UDI filed an appeal against the court's ruling. On December 7, 2016, the Superior Court of Bogota (Tribunal Superior de Bogotá) upheld the Civil Court of Bogota's decision. At this stage of the proceedings, as of March 31, 2017, we are not able to assess the likelihood of an adverse result regarding the remaining pending action filed before the Cundinamarca Administrative Court, but if adversely resolved, we do not expect that it will have a material adverse impact on our results of operations, liquidity and financial condition.

Croatian Concession Litigation. After an extended consultation period, in April 2006, the cities of Kaštela and Solin in Croatia published their respective Master (physical) Plans defining the development zones within their respective municipalities, adversely impacting the mining concession granted to CEMEX Croatia by the Government of Croatia in September 2005. During the consultation period, CEMEX Croatia submitted comments and suggestions to the Master Plans intended to protect and preserve the rights of CEMEX Croatia's mining concession, but these were not taken into account or incorporated into the Master Plans by Kaštela and Solin. Immediately after publication of the Master Plans, CEMEX Croatia filed a series of lawsuits and legal actions before the local and federal courts to protect its acquired rights under the mining concessions, including: (i) on May 17, 2006, a constitutional appeal before the constitutional court in Zagreb, seeking a declaration by the court concerning CEMEX Croatia's constitutional claim for decrease and obstruction of rights earned by investment and seeking prohibition of implementation of the Master Plans; and (ii) on May 17, 2006, an administrative proceeding before an administrative court seeking a declaration from the Government of Croatia confirming that CEMEX Croatia acquired rights under the mining concessions. The administrative court subsequently ruled in favor of CEMEX Croatia, validating the legality of the mining concession granted to CEMEX Croatia by the Government of Croatia, in September 2005. On June 15, 2012, we were notified that the case had been transferred from the constitutional court to the administrative court as a result of a new law that places the administrative courts in charge of disputes relating to environmental planning. In February 2014, the administrative court requested CEMEX Croatia to declare if it was still interested in proceeding with the concession litigation and if so, to provide additional clarification and documentation to support such claims. On March 3, 2014, CEMEX Croatia submitted the clarification and required documentation and on April 4, 2014, CEMEX Croatia was notified that the administrative court rejected its claims and found that its acquired rights or interests under the mining concessions had not been violated as a result of any act or decision made by the cities of Solin or Kaštela or any other governmental body. On April 29, 2014, CEMEX Croatia filed two claims before the Constitutional Court of the Republic of Croatia alleging that CEMEX Croatia's constitutional rights to a fair trial and judicial protection had been violated. On August 1, 2014, CEMEX Croatia also filed an application before the European Court of Human Rights alleging that CEMEX Croatia's constitutional rights to a fair trial, property rights, concession rights and investment had been violated due to irregularities in a general act, which has been denied. The European Court of Human Rights found the application to be inadmissible pursuant to articles 34 and 35 of the Convention for the Protection of Human Rights and Fundamental Freedoms, meaning that CEMEX Croatia did not exhaust all its domestic legal remedies, thus stipulating the Constitutional Court of the Republic of Croatia's jurisdiction in this matter. On February 6, 2015, the decision of the European Court of Human Rights was sent to the Constitutional Court of the Republic of Croatia. The Constitutional Court of the Republic of Croatia granted the claim, annulled the decision of the administrative court and remanded the case to the administrative court for a new trial. As of March 31, 2017, CEMEX Croatia had yet to be notified of the administrative court's decision. At this stage of the proceedings, as of March 31, 2017, we are not able to assess the likelihood of an adverse result to the claims filed before the Constitutional Court of the Republic of Croatia, but if adversely resolved, we do not believe it will have a material adverse impact on our results of operations, liquidity and financial condition. During May 2015, CEMEX Croatia obtained a new location permit from the Croatian Ministry of Construction and Physical Planning for CEMEX Croatia's Sveti Juraj-Sveti Kajo quarry. On August 2, 2016, CEMEX Croatia obtained a decision pursuant to which a right of way was granted on land owned by the Republic of Croatia and located in Sveti Juraj-Sveti Kajo quarry. The period of such right of way will be compatible with the location permit previously granted. Such decision is one of the prerequisites for obtaining a new mining concession. As of March 31, 2017, in order to alleviate the adverse impact of the Master Plans, CEMEX Croatia is in the process of negotiating and preparing all documentation necessary to comply with applicable rules and regulations in order to obtain a new mining concession.

Israeli Class Action Litigation. On June 21, 2012, one of our subsidiaries in Israel was notified about an application for the approval of a class action suit against it. The application was filed by a homeowner who built his house with concrete supplied by our Israeli subsidiary in October 2010 (a same application was filed against three other companies by the same legal representative). According to the application, the plaintiff claims that the concrete supplied to him did not meet with the "Israel Standard for Concrete Strength No. 118" and that, as a result, our Israeli subsidiary acted unlawfully toward all of its customers who requested a specific type of concrete but that received concrete that did not comply with Israeli standard requirements. As per the application, the plaintiff claims that the supply of the alleged non-conforming concrete has caused financial and non-financial damages to those customers, including the plaintiff. We presume that the class action would represent the claim of all the clients who purchased the alleged non-conforming concrete from our Israeli subsidiary during the past seven years, the limitation period according to applicable laws in Israel. The damages that could be sought amount to approximately 276 million Israeli Shekels (approximately U.S.\$75.99 million as of March 31, 2017, based on an exchange rate of 3.632 Israeli Shekels to U.S.\$1.00). Our Israeli subsidiary submitted a formal response to the corresponding court. Both parties presented their preliminary arguments. In a hearing held on December 20, 2015, the preliminary proceeding was completed and the court set dates for hearing evidence on May 8, 10 and 16, 2016. In addition, the court decided to join together all claims against all four companies, including our subsidiary in Israel, in order to simplify and shorten court proceedings, however, it should be mentioned that the court had not formally decided to join together all claims. On the hearing dates, the applicants in all four claims presented evidence, including expert testimony. The evidentiary hearing has not been completed as of March 31, 2017, and the court has set July 12, 2017 as the date to hear evidence on behalf of two other companies. As of March 31, 2017, our subsidiary in Israel is not able to assess the likelihood of the class action application being approved or, if approved, of an adverse result, such as an award for damages in the full amount that could be sought, but if adversely resolved, we do not believe the final resolutions would have a material adverse impact on our results of operations, liquidity and financial condition.

Egypt Share Purchase Agreement. On April 7, 2011 and March 6, 2012, lawsuits seeking, among other things, the annulment of the share purchase agreement entered into by and between CEMEX and state-owned

Metallurgical Industries Company (the "Holding Company") in November 1999 pursuant to which CEMEX acquired a controlling interest in ACC (the "Share Purchase Agreement"), were filed by different plaintiffs, including 25 former employees of ACC, before the 7th and 8th Circuits of Cairo's State Council Administrative Judiciary Court, respectively. Hearings in both cases were adjourned in order for the State Commissioner Authority ("SCA") to prepare the corresponding reports to be submitted for the consideration of the 7th and 8th Circuits of Cairo's State Council Administrative Judiciary Court. During March 2015, the SCA submitted the relevant reports recommending, in both cases, that the 7th and 8th Circuits of Cairo's State Council Administrative Judiciary Court stays the proceedings until the High Constitutional Court pronounces itself with regards to the challenges against the constitutionality of the Presidential Decree on Law No. 32 of 2014 ("Law 32/2014"). A hearing was held on October 13, 2015 before the 8th Circuit of Cairo's State Council Administrative Judiciary Court in which the SCA's report was reviewed and the case was adjourned to January 26, 2016 for passing judgment. At the session held on January 26, 2016, the 8th Circuit of Cairo's State Council Administrative Judiciary Court issued a judgment ruling for the dismissal of this case considering the plaintiff's lack of standing. The legal prescription period for the plaintiff to challenge the judgment before the High Administrative Court of 60 calendar days from the date of issuance of the judgment has expired without the plaintiff filing a judgment. Accordingly, the January 26, 2016 judgment issued by the 8th Circuit of Cairo's State Council Administrative Judiciary Court is final and definitive. At a session held on September 3, 2015, the 7th Circuit of Cairo's State Council Administrative Judiciary Court accepted the SCA's report recommendation and ruled for staying the proceedings until the High Constitutional Court pronounces itself with regards to the challenges against the constitutionality of Law 32/2014. As of March 31, 2017, we are not able to assess the likelihood of an adverse resolution regarding this lawsuit filed before the 7th Circuit of Cairo's State Council Administrative Judiciary Court, but if adversely resolved, we do not believe the resolution in the first instance would have an immediate material adverse impact on our results of operations, liquidity and financial condition as there are different legal recourses that we could take. However, if we exhaust all legal recourses available to us, a final adverse resolution of this matter could have a material adverse impact on our operations, liquidity and financial condition.

Regarding a different lawsuit submitted to a First Instance Court in Assiut, Egypt and notified to ACC on May 23, 2011, on September 13, 2012, the first instance court of Assiut, Egypt issued a judgment (the "First Instance Judgment") to (i) annul the Share Purchase Agreement; and (ii) reinstate former employees to their former jobs at ACC. The First Instance Judgment was notified to ACC on September 19, 2012. On October 18, 2012, ACC filed an appeal against the First Instance Judgment, which was followed by the Holding Company's appeal filed on October 20, 2012 before the Appeal Court in Assiut, Egypt (the "Appeal Court"). At a November 17, 2013 hearing, the Appeal Court decided to join the appeals filed by ACC and the Holding Company and adjourned the session to January 20, 2014 to render judgment. On January 20, 2014, the Appeal Court issued a judgment (the "Appeal Judgment") accepting both appeals, revoking the First Instance Judgment, ruling for non-qualitative jurisdiction of the first instance court to review the case and referred the matter to the administrative court in Assiut, Egypt (the "Assiut Administrative Court") for a hearing to be held on March 16, 2014. This hearing was subsequently rescheduled to May 17, 2014 and ultimately was not held because the case file had not been completed on time in order for it to be referred to the Assiut Administrative Court. The SCA submitted a report recommending that the Assiut Administrative Court to declare itself incompetent to review this case and to refer it to the Assiut Administrative Judiciary Court (the "Assiut Administrative Judiciary Court"). The Assiut Administrative Court scheduled a new hearing for October 11, 2014 to review the case. On October 15, 2014, the Assiut Administrative Court ruled for its non-jurisdiction to review the case and referred the case to the Assiut Administrative Judiciary Court. On December 11, 2014, ACC filed an appeal against the Assiut Administrative Court ruling requesting that its enforcement be suspended until a judgment is issued on the appeal filed before the Cassation Court on March 12, 2014 (the "Appeal"). On February 10, 2015 and March 17, 2015, hearings were held before the Assiut Administrative Judiciary Court's SCA in which the SCA decided to adjourn in order to prepare the corresponding report to be submitted for the consideration of the Assiut Administrative Judiciary Court. On October 2015, the SCA issued a report recommending mainly that due to the absence of geographical jurisdiction to review the case, it should be referred to the 7th Circuit of "Economic and Investment Disputes" of Cairo's State Council Administrative Judiciary Court. The Assiut Administrative

Judiciary Court held a hearing for the case on February 24, 2016, in which it decided to refer the case to the First Circuit (formerly 7th Circuit) of "Economic and Investment Disputes" of Cairo's State Council Administrative Judiciary Court. Cairo's State Council Administrative Judiciary Court held a hearing on March 28, 2017 to notify the parties of the procedures, whereupon the court adjourned the hearing until June 13, 2017 in order for the parties to submit their memoranda. In a session held on February 11, 2016 in order to review the Appeal, the Assiut Administrative Judiciary Court decided to refer the case to the First Circuit of Cairo's State Council Administrative Judiciary Court, which in turn decided to refer the Appeal to the Assiut Administrative Judiciary Court. On November 9, 2016, the Assiut Administrative Judiciary Court held a session in order to review the referred Appeal, and adjourned the Appeal to February 8, 2017. On February 8, 2017, the court adjourned the hearing until June 14, 2017 in order for the parties to submit their final memoranda. As of March 31, 2017, ACC has not been notified of a session before the First Circuit of Cairo's State Council Administrative Judiciary Court in order to review the referred case.

On March 12, 2014, ACC filed a challenge before the Cassation Court against the part of the Appeal Judgment that refers to the referral of the case to the Assiut Administrative Court and payment of the appeal expenses and attorney fees, and requested a suspension of the Appeal Judgment execution with respect to these matters until the Cassation Court renders its judgment (the "Challenge"). A hearing was held on April 12, 2016 in order to review the Challenge's summary request only, which requested the Cassation Court to stay the execution of part of the Appeal Judgment regarding the referral of the case to the Assiut Administrative Court and payment of the appeal expenses and attorney fees. At this hearing the Cassation Court rejected the summary request. As of March 31, 2017, ACC has not been notified of a session before the Cassation Court in order to review the subject matter of the Challenge. As of March 31, 2017, we are not able to assess the likelihood of an adverse resolution regarding the Challenge, but if adversely resolved, we do not believe the resolution would have an immediate material adverse impact on our results of operations, liquidity and financial condition as there are different recourses that we could take. However, if we exhaust all legal recourses available to us, a final adverse resolution of this matter could have a material adverse impact on our operations, liquidity and financial condition.

Also, on February 23, 2014, three plaintiffs filed a lawsuit before the Assiut Administrative Judiciary Court requesting the cancellation of the resolutions taken by the Holding Company's shareholders during the extraordinary general shareholders meeting pursuant to which it was agreed to sell ACC's shares and enter into the Share Purchase Agreement in 1999. A hearing held on May 17, 2014 was adjourned in order for the SCA to prepare a report to be submitted for the consideration of the Assiut Administrative Judiciary Court. On September 4, 2014, ACC received the report issued by the SCA which is non-binding to the Assiut Administrative Judiciary Court. On December 11, 2014, the Assiut Administrative Judiciary Court resolved to refer the case to the 7th Circuit of Cairo's State Council Administrative Judiciary Court. The 7th Circuit of Cairo's State Council Administrative Judiciary Court decided to adjourn to July 25, 2015 in order to review the parties' pleadings. On this hearing held on July 25, 2015, the 7th Circuit of Cairo's State Council Administrative Judiciary Court adjourned the case to September 3, 2015 for passing judgment. At the session held on September 3, 2015, the 7th Circuit of Cairo's State Council Administrative Judiciary Court ruled for staying the proceedings until the High Constitutional Court pronounces itself with regards to the challenges against the constitutionality of Law No.32/2014. As of March 31, 2017, we do not have sufficient information to assess the likelihood of the 7th Circuit of Cairo's State Council Administrative Judiciary Court cancelling the resolutions adopted by the Holding Company's shareholders, or, if such shareholders' resolutions are cancelled, how would such cancellation affect us, but if adversely resolved, we do not believe the resolution in this first instance would have an immediate material adverse impact on our results of operations, liquidity and financial condition as there are different legal recourses that we could take. However, if we exhaust all legal recourses available to us, a final adverse resolution of this matter could have a material adverse impact on our operations, liquidity and financial condition.

On April 22, 2014, Law 32/2014, which regulates legal actions to challenge agreements entered into by the Egyptian State (including its ministries, departments, special budget entities, local administrative units,

authorities and state-participated companies) and third parties, was published in the Official Gazette, becoming effective as of April 23, 2014, but subject to its presentation, discussion and approval by the House of Representatives 15 days after it holds its first session. As per the provisions of Law 32/2014, and considering certain exceptions, only the parties to these agreements have standing to challenge the validity of an agreement. During October and November 2015, parliamentary elections to the House of Representatives took place and the elected House of Representatives started to hold its sessions on January 10, 2016, as expected, and Law 32/2014 was discussed and ratified on January 20, 2016, as legally required. As of March 31, 2017, a constitutional challenge has been filed against Law 32/2014 before the High Constitutional Court. The High Constitutional Court has scheduled a hearing for May 6, 2017 to proceed with the constitutional challenge that was filed against Law 32/2014 after the SCA had submitted its report with respect to the case. As of March 31, 2017, we are not able to assess if the High Constitutional Court will dismiss Law 32/2014, but if the High Constitutional Court dismisses Law 32/2014, this could adversely impact the ongoing matters regarding the Share Purchase Agreement, which could have a material adverse impact on our operations, liquidity and financial condition.

South Louisiana Flood Protection Authority-East Claim. On July 24, 2013 a Petition for Damages and Injunctive Relief was filed by the South Louisiana Flood Protection Authority-East ("SLFPAE") in the Civil District Court for the Parish of Orleans, State of Louisiana, against approximately 100 defendants, including CEMEX, Inc. SLFPAE is seeking compensation for and the restoration of certain coastal lands near New Orleans alleged to have been damaged by activities related to oil and gas exploration and production since the early 1900s. CEMEX, Inc., which was previously named Southdown, Inc., may have acquired liabilities, to the extent there may be any, in connection with oil and gas operations that were divested in the late 1980s. The matter was removed to the United States District Court for the Eastern District of Louisiana (the "Louisiana District Court") and a motion by the Plaintiffs to remand to State Court was denied. In addition, on June 6, 2014, Louisiana Senate Bill No. 469 was enacted into Act No. 544 ("Act 544") which prohibits certain state or local governmental entities such as the SLFPAE from initiating certain causes of action including the claims asserted in this matter. The effect of Act 544 on the pending matter has yet to be determined by the Louisiana District Court. Further, CEMEX, Inc. was dismissed without prejudice by the plaintiffs. On February 13, 2015, the Louisiana District Court dismissed the plaintiffs' claims with prejudice. On February 27, 2015, the plaintiffs appealed this ruling. As of March 31, 2017, we cannot assess the likelihood of an adverse result or, because of the number of defendants, the potential damages which could be borne by CEMEX, Inc., if any, or if such damages, if any, would have a material adverse impact on our results of operations, liquidity and financial condition.

*Maceo, Colombia*—*Legal Proceedings in Colombia*. On August 28, 2012, CEMEX Colombia entered into a memorandum of understanding (the "MOU") with CI Calizas y Minerales S.A. ("CI Calizas") to acquire land, a mining concession, an environmental license, free trade zone benefits and related assets necessary to carry out the Maceo Project. In connection with the MOU, CI Calizas was represented by a non-governmental individual (the "Representative").

After the execution of the MOU, one of CI Calizas' former shareholders was linked to an expiration of property proceeding by the Colombian Attorney General's Office (the "Attorney General's Office") that, among other measures, suspended CI Calizas' ability to transfer certain assets to CEMEX Colombia as required by the MOU (the "Affected Assets"). In order to protect its interests in the Affected Assets, CEMEX Colombia joined the expiration of property proceeding, attended each procedural stage and cooperated with the Attorney General's Office. CEMEX Colombia also requested the dismissal of the expiration of property proceeding against the Affected Assets. On May 2, 2016, in order to collect further evidence, the Attorney General's Office denied CEMEX Colombia's request for the dismissal of the expiration of property proceeding. The expiration of property proceeding is in its investigative phase, pending the appointment of the *ad litem* curators by the Attorney General's Office. Upon appointment of the *ad litem* curators, the evidentiary phase will commence and the relevant evidence will be presented and studied. We expect that the Attorney General's Office's final decision as to whether it will proceed with the expiration of property proceeding with respect to the Affected Assets could take five to ten years.

In July 2013, CEMEX Colombia entered into a five-year lease agreement (the "Lease Agreement") with a depository that had been designated by the Colombian National Narcotics Directorate (*Dirección Nacional de Estupefacientes*) (the "CNND") with respect to the Affected Assets. The Lease Agreement, along with an accompanying governmental mandate, authorized CEMEX Colombia to continue the work necessary for the construction and operation of the Maceo Project during the expiration of property proceeding. The Lease Agreement is currently set to expire on July 15, 2018, unless earlier terminated by the Colombian Administrator of Special Assets (*Sociedad de Activos Especiales S.A.S*) (the "SAE"), which assumed the functions of the CNND after the CNND's liquidation. CEMEX Colombia plans to negotiate an extension to the term of the Lease Agreement and intends to continue using the Affected Assets pursuant to the terms of the Lease Agreement and accompanying mandate.

Assuming that CEMEX Colombia conducted itself in good faith, and taking into account that its investments in the Maceo Project were incurred with the consent of the SAE and CI Calizas under the Lease Agreement and the accompanying mandate, we believe the value of such investments is protected by Colombian law. Colombian law provides that, if a person builds on another person's property with the knowledge of such other person, the person that built on the property shall be compensated with the value of what was built or otherwise be transferred the property in the event the owner of the property decides to recover possession. We also believe that, during the term of the Lease Agreement and the accompanying mandate, CEMEX Colombia may use the Affected Assets in order to operate the Maceo Project. In the event that CEMEX Colombia's right to the Affected Assets is extinguished in favor of the government of Colombia, which we believe is unlikely, the SAE may decide not to sell the Affected Assets to CEMEX Colombia or not to extend the Lease Agreement. In either case, under Colombian law, CEMEX Colombia would be entitled to compensation for the value of the investments made in the Maceo Project. As of March 31, 2017, we were not able to assess the likelihood of CEMEX Colombia receiving an adverse decision relating to the expiration of property proceedings or if the ownership of the assets subject to the MOU will be extinguished in favor of the Republic of Colombia. However, as of March 31, 2017, we believe that an adverse resolution in which CEMEX Colombia is not compensated for the value of its investments in the Maceo Project could have a material adverse effect on our results of operations, liquidity or financial condition.

On December 30, 2013, CEMEX Colombia and the Representative entered into a different memorandum of understanding (the "Land MOU"), pursuant to which the Representative would represent CEMEX Colombia in the acquisition of lands adjacent to the Maceo Project. In connection with the Maceo Project, CEMEX Colombia conveyed to the Representative over U.S.\$15 million, including cash payments and interest (based on an exchange rate of 2,880.24 Colombian Pesos to U.S.\$1.00 as of March 31, 2017). Due to the expiration of property proceeding against the Affected Assets described above, the acquisition of the Affected Assets was not finalized.

During 2016, CEMEX, S.A.B. de C.V. received reports through its anonymous reporting hotline regarding potential misconduct by certain employees, including with regard to the Maceo Project. CEMEX, S.A.B. de C.V. initiated an investigation and internal audit pursuant to its corporate governance policies and its code of ethics. On September 23, 2016, CEMEX Latam disclosed that it had identified irregularities in the process for the purchase of the land related to the Maceo Project in an accusation with the Attorney General's Office so that the Attorney General's Office may take the actions it deems appropriate. Further, on December 20, 2016, CEMEX Latam enhanced such filing with additional information and findings obtained as of such date.

On September 23, 2016, CEMEX Latam and CEMEX Colombia terminated the employment of the Vice President of Planning of CEMEX Latam, who was also CEMEX Colombia's Director of Planning, and the Legal Counsel of CEMEX Latam, who was also the General Counsel of CEMEX Colombia. In addition, effective as of September 23, 2016, the Chief Executive Officer of CEMEX Latam, who was also the President of CEMEX Colombia, resigned from both positions. On October 4, 2016, in order to strengthen levels of leadership, management and corporate governance practices, the Board of Directors of CEMEX Latam resolved to split the roles of Chairman of the Board of Directors of CEMEX Latam, Chief Executive Officer of CEMEX Latam and

Director of CEMEX Colombia, and appointed a new Chairman of the Board of Directors of CEMEX Latam, a new Chief Executive Officer of CEMEX Latam, a new Director of CEMEX Colombia and a new Vice President of Planning of CEMEX Latam and CEMEX Colombia. A new legal counsel for CEMEX Latam and CEMEX Colombia was also appointed during the fourth quarter of 2016.

Additionally, pursuant to the requirements of CEMEX, S.A.B. de C.V.'s and CEMEX Latam's audit committees, CEMEX Colombia retained external counsel to assist CEMEX Latam and CEMEX Colombia to collaborate as necessary with the Attorney General's Office, as well as to assist on other related matters. A forensic investigator in Colombia was engaged, as well.

The Attorney General's Office is investigating the irregularities in connection with the transactions conducted pursuant to the MOU and the Land MOU. Such investigation is in its initial phase and, as such, we cannot predict what actions, if any, the Attorney General's Office may implement. Any actions by the Attorney General's Office and any actions taken by us in response to the aforementioned irregularities regarding the Maceo Project, including, but not limited to, the departure of the abovementioned executives, could have a material adverse effect on our results of operations, liquidity or financial condition.

SEC Investigation Relating to the Legal Proceedings in Colombia. In December 2016, CEMEX, S.A.B. de C.V. received subpoenas from the SEC seeking information to determine whether there have been any violations of the U.S. Foreign Corrupt Practices Act stemming from the Maceo Project. These subpoenas do not mean that the SEC has concluded that CEMEX, S.A.B. de C.V. or any of its affiliates violated the law. As discussed in "-Maceo, Colombia-Legal Proceedings in Colombia," internal audits and investigations by CEMEX, S.A.B. de C.V. and CEMEX Latam had raised questions about payments relating to the Maceo Project. The payments made to the Representative in connection with the Maceo Project did not adhere to CEMEX, S.A.B. de C.V.'s and CEMEX Latam's internal controls. As announced on September 23, 2016, the CEMEX Latam and CEMEX Colombia officers responsible for the implementation and execution of the above referenced payments were terminated and the then Chief Executive Officer of CEMEX Latam resigned, CEMEX, S.A.B. de C.V. has been cooperating with the SEC and the Attorney General's Office and intends to continue cooperating fully with the SEC and the Attorney General's Office. It is possible that the United States Department of Justice or investigatory entities in other jurisdictions may also open investigations into this matter. To the extent they do so, CEMEX, S.A.B. de C.V. intends to cooperate fully with any such inquiries. As of March 31, 2017, CEMEX, S.A.B. de C.V. is unable to predict the duration, scope, or outcome of the SEC investigation or any other investigation that may arise; however, CEMEX, S.A.B. de C.V. does not expect the SEC investigation to have a material adverse impact on its consolidated results of operations, liquidity or financial position.

*Maceo, Colombia—Operational Matters*. On October 27, 2016, CEMEX Latam decided to postpone the commencement of operations of the cement plant in Maceo, Colombia. This decision was mainly due to the following circumstances:

- (1) CEMEX Colombia has not received permits required to finalize road access to such cement plant. If such permits are obtained, CEMEX Latam estimates that the road access could be available in July 2017. The only existing access to such cement plant cannot guarantee safety or operations and could limit the capacity to transport products from the cement plant;
- (2) CEMEX Colombia has not received a final response to the request to expand the free trade zone that covers the Maceo Project in order to commission a new clinker line at such cement plant. Failure to obtain such expansion would jeopardize CEMEX Colombia's capability to consolidate the benefits that would otherwise be available for CEMEX Colombia in the area. As of March 31, 2017, the Colombian Ministry of Trade, Industry and Tourism (*Ministerio de Comercio, Industria y Turismo*) has not reached a final decision with respect to CEMEX Colombia's request to expand the free trade zone. CEMEX Colombia believes the delay in such decision could be related to the expiration of property proceeding against the Affected Assets, as discussed in "—*Maceo, Colombia*—*Legal Proceedings in Colombia*";

- (3) The environmental license and the mining concession related to the Maceo Project are currently held by different legal entities, which is contrary to typical procedure in Colombia. The environmental license related to the Maceo Project is held by Central de Mezclas S.A. ("Central de Mezclas"), a subsidiary of CEMEX Colombia. However, the mining permit related to the Maceo Project was remanded back to CI Calizas as a result of the revocation of such mining concession by the Mining Secretariat (Secretaría de Minas) of Antioquia in December 2013; and
- (4) CEMEX Colombia determined that the area covered by the environmental license related to the Maceo Project partially overlapped with a District of Integrated Management (*Distrito de Manejo Integrado*), which could limit the granting of the environmental license modification. Such modification seeks to achieve an increase in the proposed production under the project of up to 950,000 tons.

In connection with the environmental license that had been issued for the Maceo Project, during the second half of 2016, Corantioquia, the regional environmental agency with jurisdiction over the Maceo Project environmental license, requested authorization and consent from Central de Mezclas to reverse the assignment of the environmental license for the Maceo Project back to CI Calizas, which also holds the corresponding mining title. Central de Mezclas has petitioned Corantioquia to evaluate the basis for such request.

CEMEX Colombia had requested a modification to the environmental license, and on December 13, 2016, Corantioquia notified Central de Mezclas that it had adopted the decision to deny the request for modification of the environmental license related to the Maceo Project to 950,000 tons per annum on the basis of the overlap of the project area with the District of Integrated Management. On December 14, 2016, Central de Mezclas appealed the decision. On March 28, 2017, Central de Mezclas was notified of Corantioquia's decision, which affirmed the decision that had previously denied the modification of the environmental license for a 950,000 per annum project. As a result, as of March 31, 2017, CEMEX Colombia was actively working on the zoning and compatibility of the District of Integrated Management, as well as analyzing alternatives for a partial adjustment to the District of Integrated Management, to avoid future discussions regarding feasibility of expanding the proposed production in the Maceo Project beyond 950,000 tons per annum.

Once these alternatives are implemented, CEMEX Colombia will reconsider submitting a new request pursuing the modification of the environmental license to expand its production of 950,000 tons per annum as initially planned. In the meantime, CEMEX Colombia will limit its activities to those that do not have a negative impact on the District of Integrated Management.

CEMEX Colombia and Central de Mezclas plan to continue to work on solving the issues causing the postponement of the commissioning of the Maceo Project cement plant in order to capture, as soon as reasonably possible, the full operating benefits of this facility in Colombia. CEMEX Colombia believes some of these issues could be related to the expiration of property proceeding against the Affected Assets. As of March 31, 2017, we do not expect to suffer a material adverse impact to our results of operations, liquidity or financial condition as a result of the Maceo Project cement plant not being commissioned to operate pending resolution of these issues.

Quarry matter in France. One of our subsidiaries in France, CEMEX Granulats Rhône Méditerranée ("CEMEX Granulats"), is a party to a contract executed in 1990 (the "Quarry Contract") with SCI La Quinoniere ("SCI"), pursuant to which CEMEX Granulats has drilling rights to extract reserves and conduct quarry remediation at a quarry in the Rhone region of France. In 2012, SCI filed a claim against CEMEX Granulats for breach of the Quarry Contract, requesting the rescission of the Quarry Contract and damages plus interest, totaling an aggregate amount of approximately €55 million (approximately U.S.\$58.63 million as of March 31, 2017, based on an exchange rate of €0.9380 to U.S.\$1.00), resulting from CEMEX Granulats having partially filled the quarry allegedly in breach of the terms of the Quarry Contract. On May 18, 2016, CEMEX Granulats was notified about an adverse judgment in this matter by the corresponding court in Lyon, France, primarily ordering the rescission of the Quarry Contract and damages plus interest, totaling an aggregate amount of approximately €55 million (approximately U.S.\$58.63 million as of March 31, 2017, based on an exchange rate

of €0.9380 to U.S.\$1.00). We believe this judgment is not enforceable. On June 6, 2016, CEMEX Granulats filed the notice of appeal with the appeals court in Lyon, France and on September 5, 2016, CEMEX Granulats filed the first submission of the full appeal together with its arguments and evidence. Proceedings on any additional hearings regarding this appeal or any other actions CEMEX Granulats may initiate in this matter could take approximately 18 months to be finalized. There can be no assurance as to whether or not CEMEX Granulats will receive an adverse result to any appeals or any other recourses it may pursue. An adverse resolution on this matter could have a material adverse impact on our results of operations, liquidity and financial condition.

Panamanian Height Restriction Litigation. On July 30, 2008, the Panamanian Authority of Civil Aeronautics (Autoridad de Aeronáutica Civil) (the "AAC") denied a request from Cemento Bayano, our subsidiary, to erect structures above the permitted height restriction applicable to certain areas surrounding the Calzada Larga Airport. This height restriction applies to the construction area of our cement plant's second line. Cemento Bayano formally submitted a request to the AAC to reconsider its denial. On October 14, 2008, the AAC granted permission to construct the tallest building of the second line, under the following conditions: that (i) Cemento Bayano assumes any liability arising from any incident or accident caused by the construction of such building, and (ii) there would be no further permissions for additional structures. Cemento Bayano filed an appeal with respect to both conditions, considering that the construction involved building 12 additional structures. On March 13, 2009, the AAC issued an explanatory note, stating that (i) should an accident occur in the Calzada Larga Airport's perimeter, an investigation shall be conducted in order to determine the cause and further responsibility, and (ii) there may be no further permissions for additional structures of the same height as the tallest structure already authorized. Therefore, additional permits may be obtained as long as the structures are lower than the tallest building, based on a case-by-case analysis to be conducted by the AAC. Cemento Bayano filed an authorization request for the construction of the project's 12 remaining structures. On June 11, 2009, the AAC issued a decision authorizing three of the 12 remaining structures and denying permits for nine additional structures above the permitted height restriction applicable to certain areas surrounding Calzada Larga Airport. On June 16, 2009, Cemento Bayano requested the AAC to reconsider its denial. On May 20, 2010, the ACC issued a report stating that all vertical structures erected by Cemento Bayano complied with the applicable signaling and lighting requirements in order to receive their respective authorizations. On August 9, 2016, the AAC issued a letter approving the existence of all of the above mentioned structures and requiring Cemento Bayano to illuminate all structures. This is the AAC's final decision regarding this matter. As of March 31, 2017, this matter was closed.

As of March 31, 2017, we are involved in various legal proceedings involving, but not limited to, product warranty claims, environmental claims, claims regarding the procurement and supply of products, indemnification claims relating to divestments and acquisitions and similar types of claims brought against us that have arisen in the ordinary course of business. We believe we have made adequate provisions to cover both current and contemplated general and specific litigation risks, and we believe these matters will be resolved without any significant effect on our operations, financial position and results of operations. We are sometimes able to make and disclose reasonable estimates of the expected loss or range of possible loss, as well as disclose any provision accrued for such loss. However, for a limited number of ongoing legal proceedings, we may not be able to make a reasonable estimate of the expected loss or range of possible loss or may be able to do so but believe that disclosure of such information on a case-by-case basis would seriously prejudice our position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, we have disclosed qualitative information with respect to the nature and characteristics of the contingency, but have not disclosed the estimate of the range of potential loss.

# Item 4A—Unresolved Staff Comments

Not applicable.

# **Item 5—Operating and Financial Review and Prospects**

#### **Cautionary Statement Regarding Forward-Looking Statements**

This annual report contains forward-looking statements within the meaning of the U.S. federal securities laws. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in the U.S. federal securities laws. In some cases, these statements can be identified by the use of forward-looking words such as "may," "should," "could," "anticipate," "estimate," "expect," "plan," "believe," "predict," "potential" and "intend" or other similar words. These forward-looking statements reflect our current expectations and projections about future events based on our knowledge of present facts and circumstances and assumptions about future events. These statements necessarily involve risks and uncertainties that could cause actual results to differ materially from our expectations. Some of the risks, uncertainties and other important factors that could cause results to differ, or that otherwise could have an impact on us or our subsidiaries, include:

- the cyclical activity of the construction sector;
- our exposure to other sectors that impact our business, such as, but not limited to, the energy sector;
- competition;
- general political, economic and business conditions in the markets in which we operate or that affect our operations;
- the regulatory environment, including environmental, tax, antitrust and acquisition-related rules and regulations;
- our ability to satisfy our obligations under our material debt agreements, the indentures that govern our Senior Secured Notes and our other debt instruments;
- the impact of our below investment grade debt rating on our cost of capital;
- our ability to consummate asset sales, fully integrate newly acquired businesses, achieve cost-savings from our cost-reduction initiatives and implement our global pricing initiatives for our products;
- the increasing reliance on information technology infrastructure for our invoicing, procurement, financial statements and other processes that can adversely affect operations in the event that the infrastructure does not work as intended, experiences technical difficulties or is subjected to cyberattacks;
- weather conditions:
- · natural disasters and other unforeseen events; and
- the other risks and uncertainties described under "Item 3—Key Information—Risk Factors" and elsewhere in this annual report.

Readers are urged to read this annual report and carefully consider the risks, uncertainties and other factors that affect our business. The information contained in this annual report is subject to change without notice, and we are not obligated to publicly update or revise forward-looking statements. Readers should review future reports filed by us with the SEC.

This annual report also includes statistical data regarding the production, distribution, marketing and sale of cement, ready-mix concrete, clinker and aggregates. We generated some of this data internally, and some was obtained from independent industry publications and reports that we believe to be reliable sources. We have not independently verified this data nor sought the consent of any organizations to refer to their reports in this annual report.

#### Overview

The following discussion should be read in conjunction with our consolidated financial statements included elsewhere in this annual report. Our financial statements have been prepared in accordance with IFRS.

The regulations of the SEC do not require foreign private issuers that prepare their financial statements on the basis of IFRS (as published by IASB) to reconcile such financial statements to U.S. GAAP.

The percentage changes in cement sales volumes described in this annual report for our operations in a particular country or region include the number of tons of cement and/or the number of cubic meters of ready-mix concrete sold to our operations in other countries and regions. Likewise, unless otherwise indicated, the net sales financial information presented in this annual report for our operations in each country or region includes the Mexican Peso amount of sales derived from sales of cement and ready-mix concrete to our operations in other countries and regions, which have been eliminated in the preparation of our consolidated financial statements included elsewhere in this annual report.

The following table sets forth selected consolidated financial information as of December 31, 2016 and 2015 and for each of the three years ended December 31, 2016 by principal geographic segment expressed as an approximate percentage of our total consolidated group. We operate in countries and regions with economies in different stages of development and structural reform and with different levels of fluctuation in exchange rates, inflation and interest rates. These economic factors may affect our results of business, financial conditions and results of operations, depending upon the depreciation or appreciation of the exchange rate of each country and region in which we operate compared to the Mexican Peso and the rate of inflation of each of these countries and regions.

	Net Sales For the Period Ended December 31,			Operating Earnings Before Other Expenses, Net For the Period Ended December 31,			Total Assets at December 31,	
	2014(1)	2015(1)	2016(1)	2014(2)	2015(2)	2016(2)	2015(2)	2016(2,3)
Mexico	23%	21%	20%	51%	49%	48%	14%	12%
United States	21%	24%	26%	(2)%	8%	13%	49%	50%
Europe								
United Kingdom	8%	8%	8%	3%	6%	7%	6%	6%
Germany	6%	3%	4%	1%	1%	0.3%	1%	1%
France	6%	5%	5%	2%	1%	1%	3%	3%
Spain	2%	3%	2%	(1)%	2%	0.4%	4%	5%
Rest of Europe	4%	4%	4%	2%	2%	1%	3%	3%
SAC								
Colombia	6%	5%	5%	20%	13%	10%	4%	5%
Rest of SAC	7%	8%	7%	19%	16%	15%	4%	4%
Asia, Middle East and Africa								
Egypt	3%	3%	3%	10%	5%	5%	2%	1%
Philippines	3%	4%	4%	5%	7%	6%	2%	2%
Rest of Asia, Middle East and								
Africa	4%	5%	5%	4%	4%	4%	2%	2%
Corporate and Other								
Operations	6%	7%	7%	(13)%	(13)%	6 (11)%	6%	6%
Continuing operations	220,838	239,838	264,480	21,853	26,489	35,264	536,873	574,535
Discontinued operations	10,134	10,918	8,223	331	610	818	5,391	25,193
Eliminations	(20,949)	(19,569)	(13,778)					
Consolidated	210,023	231,187	258,925	22,184	27,099	36,082	542,264	599,728

- (1) Percentages by reporting segment are determined before eliminations resulting from consolidation.
- (2) Percentages by reporting segment are determined after eliminations resulting from consolidation.
- (3) Total assets at December 31, 2015 exclude assets of our Austria and Hungary discontinued operations. See note 4A to our consolidated financial statements included elsewhere in this annual report.
- (4) Total assets at December 31, 2016 exclude assets of our Thailand and Bangladesh discontinued operations. See note 4A to our consolidated financial statements included elsewhere in this annual report.

## **Critical Accounting Policies**

The preparation of financial statements in accordance with IFRS principles requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the period. These assumptions are reviewed on an ongoing basis using available information. Actual results could differ from these estimates.

The main items subject to estimates and assumptions by management include, among others, impairment tests of long-lived assets, allowances for doubtful accounts and inventories, recognition of deferred income tax assets, uncertain tax positions, as well as the measurement of financial instruments at fair value, asset retirement obligations, emission rights and the assets and liabilities related to employee benefits. Significant judgment by management is required to appropriately assess the amounts of these assets and liabilities.

Identified below are the accounting policies we have applied under IFRS that are critical to understanding our overall financial reporting.

#### **Income Taxes**

Our operations are subject to taxation in many different jurisdictions throughout the world. The effects reflected in profit or loss for income taxes include the amounts incurred during the period and the amounts of deferred income taxes, determined according to the income tax law applicable to each subsidiary. Under IFRS, we recognize deferred tax assets and liabilities using a balance sheet methodology which requires a determination of the temporary differences resulting from comparing the book and taxable values of assets and liabilities, considering tax loss carryforwards as well as other recoverable tax and credits, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Our worldwide tax position is highly complex and subject to numerous laws that require interpretation and application and that are not consistent among the countries in which we operate. Significant judgment is required to appropriately assess the amounts of tax assets and liabilities. We expect to recover or settle the carrying amount of our assets and liabilities at the end of the reporting period. If this determination cannot be made, a valuation allowance is established to reduce the carrying value of the asset.

For the recognition of deferred tax assets derived from net operating losses and their corresponding valuation reserve, we make an assessment of:

- (a) the aggregate amount of self-determined tax loss carryforwards included in our income tax returns in each country where we consider, based on available evidence, that the tax authorities would not reject such self-determined tax loss carryforwards; and
- (b) the likelihood of the recoverability of such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income.

If we consider that it is more likely than not that the tax authorities would reject a self-determined deferred tax asset, we would decrease such deferred tax assets. Likewise, if we consider that we would not be able to use a deferred tax carryforward asset before its expiration, we would increase our valuation reserve. Both situations would result in additional income tax for the period in which such determination is made.

We consider all available positive and negative evidence including factors such as market conditions, industry analysis, our expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc., in the determination of whether it is probable that such deferred tax assets will ultimately be realized.

Every reporting period, we analyze our actual results versus our estimates and adjust our tax asset valuations as necessary. If actual results vary from our estimates, the deferred tax asset and/or valuations may be affected and necessary adjustments will be made based on relevant information. Any adjustments recorded will affect our statement of operations in such period.

The income tax effects from an uncertain tax position are recognized when it is probable that the position will be sustained based on its technical merits and assuming that the tax authorities will examine each position and have full knowledge of all relevant information, and they are measured using a cumulative probability model. Each position has been considered on its own, regardless of its relation to any other broader tax settlement. The probability threshold represents a positive assertion by management that we are entitled to the economic benefits of a tax position. If it is improbable for a tax position to be sustained, no benefits of the position are recognized. Our policy is to recognize interest and penalties related to unrecognized tax benefits as part of the income tax in the consolidated statements of operations.

Our overall strategy is to structure our worldwide operations to minimize or defer the payment of income taxes on a consolidated basis. Many of the activities we undertake in pursuing this tax reduction strategy are highly complex and involve interpretations of tax laws and regulations in multiple jurisdictions and are subject to review by the relevant taxing authorities. It is possible that the taxing authorities could challenge our application of these regulations to our operations and transactions. The taxing authorities have in the past challenged interpretations that we have made and have assessed additional taxes. Although we have, from time to time, paid some of these additional assessments, in general, we believe that these assessments have not been material and that we have been successful in sustaining our positions. No assurance can be given, however, that we will continue to be as successful as we have been in the past or that pending appeals of current tax assessments will be judged in our favor. Our effective income tax rate is determined by dividing the line item Income tax in our consolidated statements of operations, which is comprised by current and deferred income tax benefit or expense for the period, into the line item Gain (loss) before income tax. This effective tax rate is further reconciled to our statutory tax rate applicable in Mexico and is presented in note 19C to our 2016 audited consolidated financial statements included elsewhere in this annual report. During 2014, we experienced consolidated losses before income tax. In any given period where a loss before income tax is reported, the reference statutory tax rate to which CEMEX reconciles its effective income tax rate is shown as a negative percentage. A significant effect in CEMEX's effective tax rate, and consequently in the aforementioned reconciliation of CEMEX's effective tax rate, relates to the difference between the statutory income tax rate in Mexico of 30% against the applicable income tax rates of each country where we operate. For the years ended December 31, 2016, 2015 and 2014, the statutory tax rates in CEMEX's main operations were as follows:

Country	2014	2015	2016
Mexico	30.0%	30.0%	30.0%
United States	35.0%	35.0%	35.0%
United Kingdom	21.5%	20.3%	20.0%
France	38.0%	38.0%	34.4%
Germany	29.8%	29.8%	28.2%
Spain	30.0%	28.0%	25.0%
Philippines	30.0%	30.0%	30.0%
Colombia	34.0%	39.0%	40.0%
Egypt	30.0%	22.5%	22.5%
Switzerland	9.6%	9.6%	9.6%
Others	10.0% - 39.0%	7.8% - 39.0%	7.8% - 39%

Our current and deferred income tax amounts included in our consolidated statements of operations are highly variable, and are subject, among other factors, to the amounts of taxable income determined in each jurisdiction in which we operate. Such amounts of taxable income depend on factors such as sale volumes and prices, costs and expenses, exchange rates fluctuations and interest on debt, among others, as well as on the estimated tax assets at the end of the period due to the expected future generation of taxable gains in each jurisdiction. See our discussion of operations included elsewhere in this "Item 5—Operating and Financial Review and Prospects."

### Derivative financial instruments

In compliance with the guidelines established by our risk management committee and the restrictions in our debt agreements and debt instruments, we use derivative financial instruments such as interest rate and currency swaps, currency and equity forward arrangements, and other instruments, in order to change the risk profile associated with changes in interest rates, the foreign exchange rates of debt agreements, or both, as an alternative source of financing, and as hedges of: (i) highly probable forecasted transactions, (ii) purchases of certain commodities, and (iii) our net assets in foreign subsidiaries. These instruments have been negotiated with institutions with significant financial capacity; therefore, we consider the risk of non-compliance with the obligations agreed upon by such counterparties to be minimal.

Derivative financial instruments are recognized as assets or liabilities in the balance sheet at their estimated fair values, and the changes in such fair values are recognized in the statements of operations within "Other financial (expense) income, net" for the period in which they occur, except for changes in the fair value of derivative instruments associated with cash flow hedges, in which case, such changes in fair value are recognized in stockholders' equity, and are reclassified to earnings as the interest expense of the related debt is accrued, in the case of interest rate swaps, or when the underlying products are consumed in the case of contracts on the price of raw materials, fuel and commodities. Likewise, in hedges of the net investment in foreign subsidiaries, changes in fair value are recognized in stockholders' equity as part of the foreign currency translation result, which reversal to earnings would take place upon disposal of the foreign investment. During the reported periods, we have not designated any derivative instruments in fair value hedges. Derivative instruments are negotiated with institutions with significant financial capacity; therefore, CEMEX believes the risk of non-performance of the obligations agreed to by such counterparties to be minimal. See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Accrued interest generated by derivative financial instruments, when applicable, is recognized as financial expense, adjusting the effective interest rate of the related debt. Pursuant to their recognition at fair value under IFRS, our balance sheets and statements of operations are subject to volatility arising from variations in interest rates, exchange rates, share prices and the counterparty's credit risk, among other conditions established in our derivative financial instruments. The estimated fair value under IFRS represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, considering the counterparty's credit risk in the valuation, that is, an exit price or a market-based measurement.

The concept of exit value is premised on the existence of a market and market participants for the specific asset or liability. When there is no market and/or market participants willing to make a market, IFRS establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1—It represents quoted prices (unadjusted) in active markets for identical assets or liabilities that
we have the ability to access at the measurement date. A quote price in an active market provides the
most reliable evidence of fair value and is used without adjustment to measure fair value whenever
available.

- Level 2—This are inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly, and are used mainly to determine the fair value of securities, investments or loans that are not actively traded. Level 2 inputs included equity prices, certain interest rates and yield curves, implied volatility, credit spreads and other market corroborated inputs, including inputs extrapolated from other observable inputs. In the absence of Level 1 inputs we determined fair values by iteration of the applicable Level 2 inputs, the number of securities and/or the other relevant terms of the contract, as applicable.
- Level 3—This are unobservable inputs for the asset or liability. We use unobservable inputs to determine fair values, to the extent there are no Level 1 or Level 2 inputs, in valuation models such as Black-Scholes, binomial, discounted cash flows or multiples of Operating EBITDA, including risk assumptions consistent with what market participants would use to arrive at fair value.

Significant judgment and estimates by management are required to appropriately identify the corresponding level of fair value applicable to each derivative financing transaction, as well as to assess the amounts of the resulting assets and liabilities, mainly in respect of level 2 and level 3 fair values, in order to account for the effects of derivative financial instruments in the financial statements. See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# Impairment of long-lived assets

Our balance sheet reflects significant amounts of long-lived assets (including property, machinery and equipment, goodwill, intangible assets of definite life and other investments) associated with our operations throughout the world. Many of these amounts have resulted from past acquisitions, which have required us to reflect these assets at their fair market values at the dates of acquisition. According to their characteristics and the specific accounting rules related to them, we assess the recoverability of our long-lived assets at least once a year, normally during the fourth quarter, as is the case for goodwill, or whenever events or circumstances arise that we believe trigger a requirement to review such carrying values, as is the case with property, machinery and equipment and intangible assets of definite life.

Property, machinery and equipment, intangible assets of definite life and other investments are tested for impairment upon the occurrence of factors such as the occurrence of a significant adverse event, changes in our operating environment, changes in projected use or in technology, as well as expectations of lower operating results for each cash generating unit, in order to determine whether their carrying amounts may not be recovered. In such cases, an impairment loss is recorded in the statements of operations for the period when such determination is made within "Other expenses, net." The impairment loss of an asset results from the excess of the asset's carrying amount over its recoverable amount, corresponding to the higher of the fair value of the asset, less costs to sell such asset, and the asset's value in use, the latter represented by the net present value of estimated cash flows related to the use and eventual disposal of the asset.

We do not have intangible assets of indefinite life other than goodwill. As mentioned above, goodwill is tested for impairment when required due to significant adverse changes or at least once a year, during the last quarter of such year, by determining the recoverable amount of the group of cash-generating units ("CGUs") to which goodwill balances have been allocated, which consists of the higher of such group of CGUs fair value, less cost to sell and its value in use, represented by the discounted amount of estimated future cash flows to be generated by such CGUs to which goodwill has been allocated. Other intangible assets of indefinite life may be tested at the CGU or group of CGUs level, depending on their allocation. We determine discounted cash flows generally over periods of five years. In specific circumstances, when, according to our experience, actual results for a given cash-generating unit do not fairly reflect historical performance and most external economic variables provide us with confidence that a reasonably determinable improvement in the mid-term is expected in their operating results, management uses cash flow projections over a period of up to ten years, to the point in which future expected average performance resembles the historical average performance and to the extent we have

detailed, explicit and reliable financial forecasts and is confident and can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period. If the value in use of a group of CGUs to which goodwill has been allocated is lower than its corresponding carrying amount, we determine the fair value of our reporting units using methodologies generally accepted in the market to determine the value of entities, such as multiples of Operating EBITDA and by reference to other market transactions, among others. An impairment loss under IFRS is recognized within other expenses, net, if the recoverable amount is lower than the net book value of the group of CGUs to which goodwill has been allocated. Impairment charges recognized on goodwill are not reversed in subsequent periods.

For the years ended December 31, 2014, 2015 and 2016, the geographic segments we reported in note 4C to our 2016 audited consolidated financial statements included elsewhere in this annual report represent our groups of CGUs to which goodwill has been allocated for purposes of testing goodwill for impairment. In arriving at this conclusion, we considered: (a) that after the acquisition, goodwill was allocated at the level of the geographic operating segment; (b) that the operating components that comprise the reported segment have similar economic characteristics; (c) that the reported segments are used by us to organize and evaluate its activities in its internal information system; (d) the homogenous nature of the items produced and traded in each operative component, which are all used by the construction industry; (e) the vertical integration in the value chain of the products comprising each component; (f) the type of clients, which are substantially similar in all components, (g) the operative integration among components; and (h) the compensation system of specific country is based on the consolidated results of the geographic segment and not on the particular results of the components. In addition, the country level represents the lowest level within us at which goodwill is monitored for internal management purposes.

Significant judgment by management is required to appropriately assess the fair values and values in use of these assets. Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of our products, the development of operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets as well as the discount rates and the growth rates in perpetuity applied. For purposes of estimating future prices, we use, to the extent available, historical data plus the expected increase or decrease according to information issued by trusted external sources, such as national construction or cement producer chambers and/or in governmental economic expectations. Operating expenses are normally measured as a constant proportion of revenues, following past experience. However, such operating expenses are also reviewed considering external information sources in respect to inputs that behave according to international prices, such as gas and oil. We use specific pre-tax discount rates for each group of CGUs to which goodwill is allocated, which are applied to pre-tax cash flows. The amounts of estimated undiscounted cash flows are significantly sensitive to the growth rate in perpetuity applied. Likewise, the amounts of discounted estimated future cash flows are significantly sensitive to the weighted average cost of capital (discount rate) applied. The higher the growth rate in perpetuity applied, the higher the amount obtained of undiscounted future cash flows by group of CGUs obtained. Conversely, the higher the discount rate applied, the lower the amount obtained of discounted estimated future cash flows by group of CGUs obtained. Additionally, we monitor the useful lives assigned to these long-lived assets for purposes of depreciation and amortization, when applicable. This determination is subjective and is integral to the determination of whether impairment has occurred.

During the last quarter of 2014, 2015 and 2016, we performed our annual goodwill impairment test. Based on these analyses, we did not determine impairment losses of goodwill in any of the reported periods. See note 15C to our 2016 audited consolidated financial statements included elsewhere in this annual report. Pretax discount rates and long-term growth rates used to determine the discounted cash flows in the group of CGUs with the main goodwill balances in 2014, 2015 and 2016 are as follows:

	Discount rates			Growth rates		
Reporting units	2014	2015	2016	2014	2015	2016
United States	8.7%	8.6%	8.6%	2.5%	2.5%	2.5%
Spain	10.1%	9.9%	9.5%	2.0%	1.9%	1.6%
Mexico	9.7%	9.6%	9.8%	3.8%	3.5%	2.9%
Colombia	9.7%	9.8%	10.0%	3.0%	4.0%	4.0%
France	9.2%	9.0%	9.1%	1.7%	1.6%	1.8%
UAE	10.4%	10.2%	10.2%	3.4%	3.6%	3.4%
United Kingdom	9.0%	8.8%	8.8%	2.4%	2.3%	1.9%
Egypt	11.6%	12.5%	11.4%	4.0%	4.6%	6.0%
Range of discount rates in						
other countries	9.2% - 14.0% 9	.0% - 13.8% 9	.1% - 12.8% 2	2.1% - 4.9% 2	2.4% - 4.3% 2	2.2% - 7.0%

As of December 31, 2016, the discount rates we used in our cash flow projections remained relatively flat in countries with the most significant goodwill balances as compared to the values determined in 2015. During the year, the funding cost observed in the industry decreased from 6.9% in 2015 to 6.2% in 2016, and the risk-free rate also decreased from approximately 3.2% in 2015 to 2.7% in 2016. These reductions were partially offset by overall increases in the sovereign risk rate of the majority of the countries where CEMEX operates as well as in the risk multiple associated with CEMEX that increased from 1.08 in 2015 to 1.29 in 2016. As of December 31, 2015, the discount rates remained almost flat in most cases as compared to the values determined in 2014. Among other factors, the funding cost observed in the industry increased from 6.1% in 2014 to 6.9% in 2015, and the risk free rate increased from approximately 3.1% in 2014 to 3.2% in 2015. Nonetheless, these increases were offset by reductions in 2015 in the country specific sovereign yields in the majority of the countries where CEMEX operates. As of December 31, 2014, the discount rates decreased mainly as a result of the reduction in the funding cost as compared to the prior year and the reduction in the risk free rate, both being significant assumptions in the determination of the discount rates. In respect to long-term growth rates, following general practice under IFRS, CEMEX uses country specific rates, which are mainly obtained from the Consensus

Economics, a compilation of analysts' forecast worldwide, or from the International Monetary Fund when the

first are not available for a specific country.

In connection with our assumptions included in the table above, we performed sensitivity analyses to changes in assumptions, affecting the value in use of all groups of cash-generating units with an independent reasonably possible increase of 1% in the pre-tax discount rate, and an independent possible decrease of 1% in the long-term growth rate. In addition, we performed cross-check analyses for reasonableness of our results using multiples of Operating EBITDA. In order to arrive at these multiples, which represent a reasonableness check of our discounted cash flow models; we determined a weighted average of multiples of Operating EBITDA to enterprise value observed in the industry. The average multiple was then applied to a stabilized amount of Operating EBITDA and the result was compared to the corresponding carrying amount for each group of cash-generating units to which goodwill has been allocated. As of December 31, 2015 and 2016, we considered an industry weighted average Operating EBITDA multiple of 9.0. Our own EBITDA multiples to enterprise value as of the same dates were 8.7 times in 2015 and 8.9 times in 2016. The lowest multiple observed in our benchmark as of December 31, 2015 and 2016 was 5.8 times and 5.9 times, and the highest was 18.0 times and 18.3 times, respectively.

As of December 31, 2016 and 2015, none of our sensitivity analyses resulted in a relative impairment risk in our operating segments.

Nonetheless, we continually monitor the evolution of the specific cash-generating units to which goodwill has been allocated and, in the event that the relevant economic variables and the related cash flows projections would be negatively affected, it may result in a goodwill impairment loss in the future.

We maintain a market capitalization significantly lower than our levels prior to the 2008 global crisis, which we believe is due to several factors such as: a) the slower recovery of the construction industry in the United States, one of our main markets, which suffered one of the deepest recessions since the Great Depression, which also significantly affected our operations in key countries and regions such as Mexico and Europe, and consequently our overall generation of cash flows; b) our significant amount of consolidated debt, which generates uncertainty in the markets regarding our ability to meet our financial obligations; and c) the generalized capital outflows from emerging markets, such as Mexico and Colombia, mainly due to high volatility generated by risk aversion in the global financial markets, to safer assets in developed countries such as the United States. In Dollar terms, our market capitalization as of December 31, 2016 was approximately U.S.\$11.2 billion (Ps232.2 billion), reflecting an increase of approximately 52% in 2016 as compared to 2015. This increase was mainly generated by initiatives to increase free cash flow from our operations and asset divestments aimed to reduce indebtedness and financial leverage, along with a reduction of risk aversion across global financial markets as U.S. stock indices reached new all-time highs and international oil prices partially recovered during 2016 amid reduced global growth concerns. These trends occurred despite the continued depreciation of emerging markets currencies against the U.S. Dollar in 2016 and continued uncertainty of the pace and timing of actions to increase interest rates in the United States. Our market capitalization decreased by approximately 41% in 2015 compared to 2014, to approximately U.S.\$7.4 billion (Ps126.8 billion). This decrease was mainly due to the significant depreciation of the emerging markets currencies against the U.S. Dollar in 2015, which intensified in the second half of the year, as well as a significant reduction in the international oil prices, uncertainty generated by the pace and timing of actions to increase interest rates in the United States, China growth concerns, lower global growth expectations and the uncertainty of our income in U.S. Dollar terms from our operations in emerging markets such as Mexico and Colombia (countries with important dependence on oil revenues for their government budget), which may result in the cancellation or delay of government infrastructure projects.

As of December 31, 2016 and 2015, goodwill allocated to the United States accounted for approximately 79% and 80%, respectively, of our total amount of consolidated goodwill. In connection with our determination of value in use relative to our groups of CGUs in the United States in the reported periods, we have considered several factors, such as the historical performance of such operating segment, including operating losses in recent years, the long-term nature of our investment, the recent signs of recovery in the construction industry, the significant economic barriers for new potential competitors considering the high investment required, and the lack of susceptibility of the industry to technology improvements or alternate construction products, among other factors. We have also considered recent developments in our operations in the United States, such as the 1%, 13% and 2% increases in ready-mix concrete volumes in 2016, 2015 and 2014, respectively, and the 1%, 5% and 8% increases in 2016, 2015 and 2014, respectively, of ready-mix concrete prices, which are key drivers for cement consumption and our profitability, and which trends are expected to continue over the next few years, as anticipated in our cash flow projections.

As a result of impairment tests conducted on several cash-generating units considering certain triggering events, mainly: a) the closing and/or reduction of operations of cement and ready-mix concrete plants resulting from adjusting our supply to current demand conditions, b) the transferring of installed capacity to more efficient plants, such as the projected closing in the short term of a cement mill in Colombia, and c) the recoverability of certain investments in Colombia, we recognized impairment losses on property, plant and equipment, for an aggregate amount of approximately Ps575 million (U.S.\$39 million), Ps1,145 million (U.S.\$66 million) and Ps1,898 million (U.S.\$101 million) in 2014, 2015 and 2016, respectively, and adjusted the related fixed assets to their estimated value in use in those circumstances in which the assets would continue in operation based on estimated cash flows during their remaining useful life, or to their realizable value, in case of permanent shut down.

During 2015 and 2016, the breakdown of impairment losses by country was as follows:

	For the Year Ended December 31,		
	2015	2016	
	(in millions of Mexican Pesos)		
Puerto Rico	Ps 172	Ps 1,087	
Colombia	_	454	
Spain	392	_	
United States	269	277	
Latvia	126	_	
Panama	118	_	
Mexico	46	46	
United Kingdom	19	_	
Germany	_	_	
Other countries	3	34	
	Ps 1,145	Ps 1,898	

See note 15C to our 2016 audited consolidated financial statements included elsewhere in this annual report.

#### Valuation reserves on accounts receivable and inventories

On a periodic basis, we analyze the recoverability of our accounts receivable and our inventories, in order to determine if, as a result of internal events, such as physical damage, or external events, such as technological changes or market conditions, certain portions of such balances have become obsolete or impaired. When an impairment situation arises, the inventory balance is adjusted to its net realizable value, whereas, if an obsolescence situation occurs, the inventory obsolescence reserve is increased. In both cases, these adjustments are recognized against the results of the period. Advances to suppliers of inventory are presented as part of other current assets.

## Asset retirement obligations

We recognize unavoidable obligations, legal or constructive, to restore operating sites upon retirement of long-lived assets at the end of their useful lives, which are measured at the net present value of estimated future cash flows to be incurred in the restoration process, and are initially recognized against the related assets' book value. The increase to the assets' book value is depreciated during its remaining useful life. The increase of the liability, related to the passage of time is charged to the line item titled "Other financial expenses, net." Adjustments to the liability for changes in estimations are recognized against fixed assets, and depreciation is modified prospectively.

Asset retirement obligations are related mainly to future costs of demolition, cleaning and reforestation, so that quarries, maritime terminals and other production sites are left in acceptable condition at the end of their operation. See notes 17 and 24 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# Emission rights

In some of the countries where we operate, such as in countries of the EU, governments have established mechanisms aimed at reducing CO2 by means of which, industries releasing CO2 must submit to the environmental authorities at the end of a compliance period, emission rights for a volume equivalent to the tons of CO2 released. Since the mechanism for emissions reduction in the EU has been in operation, a certain number of emission rights based on historical levels have been granted by the environmental authorities to industries free of cost. Therefore, companies are required to buy additional emission rights to meet any deficit between actual

CO2 emissions during the compliance period and emission rights held. Companies with surplus emission rights can also dispose of such surpluses in the market. In addition, the UNFCCC grants CERs to qualified CO2 emission reduction projects. CERs may be used in specified proportions to settle emission rights obligations in the EU. We actively participate in the development of projects aimed to reduce CO2 emissions. Some of these projects have been awarded with CERs.

In the absence of an IFRS that defines the accounting treatment for these schemes, we account for the effects associated with CO2 emission reduction mechanisms as follows:

- Certificates received free of cost are not recognized in the balance sheet. Revenues from the sale of any surplus of certificates are recognized by decreasing cost of sales. In forward sale transactions, revenues are recognized upon physical delivery of the emission certificates.
- Emission rights and/or CERs acquired to hedge current CO2 emissions are recognized as intangible assets at cost, and are further amortized to cost of sales during the compliance period. In the case of forward purchases, assets are recognized upon physical reception of the emission certificates.
- We accrue a provision against cost of sales when the estimated annual emissions of CO2 are expected
  to exceed the number of emission rights, net of any benefit obtained through swap transactions of
  emission rights for CERs.
- CERs received from the UNFCCC are recognized as intangible assets at their development cost, which
  are attributable mainly to legal expenses incurred with authorities in the process of obtaining such
  CERs.

During 2014, 2015 and 2016, there were no sales of emission rights. In addition, in certain countries, the environmental authorities impose levies per ton of CO2 or other greenhouse gases released. Such expenses are recognized as part of cost of sales as incurred.

## Revenue recognition

Our consolidated net sales represent the value, before tax on sales, of products and services sold by consolidated subsidiaries as a result of ordinary activities, after the elimination of related parties transactions and are quantified at the fair value of the consideration received or receivable, decreased by any trade discounts or volume rebates granted to customers.

Revenue from the sale of goods and services is recognized when goods are delivered or services are rendered to customers, there is no condition or uncertainty implying a reversal thereof, and they have assumed the risk of loss. Revenues from trading activities, in which we acquire finished goods from a third party and subsequently we sell the goods to another third party, are recognized on a gross basis, considering that we assume the total risk of property on the goods purchased and we are not acting as agent or broker.

Revenue and costs associated with construction contracts are recognized in the period in which the work is performed by reference to the stage of completion of the contract activity at the end of the period, considering that the following have been defined: (a) each party's enforceable rights regarding the asset to be constructed; (b) the consideration to be exchanged; (c) the manner and terms of settlement; (d) actual cost incurred and contract costs required to complete the asset are effectively controlled; and (e) it is probable that the economic benefits associated with the contract will flow to us.

The percentage of completion of construction contracts represents the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs or the surveys of work performed or the physical proportion of the contract work completed, whichever better reflects the percentage of completion under the specific circumstances. Progress payments and advances received from customers do not reflect the work performed and are recognized as a short or long term advanced payments, as appropriate.

### **Results of Operations**

## **Consolidation of Our Results of Operations**

Our 2016 audited consolidated financial statements included elsewhere in this annual report include those subsidiaries in which we hold a controlling interest or which we otherwise control. Control exists when we have the power, directly or indirectly, to govern the administrative, financial and operating policies of an entity in order to obtain benefits from its activities.

Investments in associates are accounted for by the equity method, when we have significant influence, which is generally presumed with a minimum equity interest of 20% unless it is proven that we have significant influence with a lower percentage. Under the equity method, after acquisition, the investment's original cost is adjusted for the proportional interest of the holding company in the associate's equity and earnings, considering the effects of inflation.

All balances and transactions between the group subsidiaries have been eliminated in consolidation.

For the years ended December 31, 2014, 2015 and 2016, our consolidated results reflect the following transactions:

- On November 18, 2016, after all conditions precedent were satisfied, CEMEX, S.A.B. de C.V. announced that it had closed the sale of certain assets in the U.S. to GCC for approximately U.S.\$306 million. The assets were sold by an affiliate of CEMEX to an affiliate of GCC in the U.S., and mainly consisted of CEMEX's cement plant in Odessa, Texas, two cement terminals and the building materials business in El Paso, Texas and Las Cruces, New Mexico.
- On September 12, 2016, one of our subsidiaries in the U.S. signed a definitive agreement for the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle Materials Inc. for U.S.\$400 million. The proceeds obtained from this transaction were used mainly for debt reduction and for general corporate purposes. This transaction closed on February 10, 2017.
- On July 18, 2016, CHP closed its initial public offering of 45% of its common shares in the Philippines, and 100% of CHP's common shares started trading on the Philippine Stock Exchange under the ticker "CHP." As of March 31, 2017, CASE, an indirect subsidiary of CEMEX España, directly owned approximately 55% of CHP's outstanding common shares. The net proceeds to CHP from its initial public offering were approximately U.S.\$506.8 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CHP. CHP used the net proceeds from the initial public offering to repay existing indebtedness owed to BDO Unibank and to an indirect subsidiary of CEMEX.
- On March 10, 2016, CEMEX, S.A.B. de C.V. announced the sale of its operations in Bangladesh and Thailand to SIAM Cement for approximately U.S.\$53 million, which closed on May 26, 2016. The proceeds from this transaction were used mainly for debt reduction and for general corporate purposes. Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.
- On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations

in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

- On October 31, 2015, after all conditions precedent were satisfied, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million), after final adjustments for changes in cash and working capital balances as of the transfer date. Our combined operations in Austria and Hungary consisted of 29 aggregate quarries and 68 ready-mix plants. The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in our statements of operations, were reclassified to the single line item "Discontinued operations," which includes, in 2015, a gain on sale of approximately U.S.\$45 million (Ps741 million). Such gain on sale includes the reclassification to the statement of operations of foreign currency translation effects accrued in equity until October 31, 2015 for an amount of approximately Ps215 million. See note 4A to our consolidated financial statements included elsewhere in this annual report.
- On October 31, 2014, we announced that we had entered into agreements with Holcim, a global producer of building materials based in Switzerland, to complete a series of related transactions in Europe, which closed on January 5, 2015, with retrospective effect as of January 1, 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report. As a result, (i) CEMEX acquired all of Holcim's assets in the Czech Republic, including a cement plant, four aggregates quarries and 17 ready-mix plants for approximately €115 million (U.S.\$139 million or Ps2,049 million); (ii) CEMEX sold to Holcim assets in the western region of Germany, consisting of one cement plant, two cement grinding mills, one slag granulator, 22 aggregates quarries and 79 ready-mix plants for approximately €171 million (U.S.\$207 million or Ps3,047 million), while CEMEX maintained its operations in the north, east and south of Germany; and (iii) CEMEX acquired from Holcim one cement plant in the southern part of Spain, and one cement mill in the central part of Spain, among other related assets for approximately €88 million (U.S.\$106 million or Ps1,562 million); we kept our other operations in Spain. In connection with these transactions, in January 2015 CEMEX made a final payment in cash, after combined debt and working capital adjustments, of approximately €33 million (U.S.\$40 million or Ps594 million).

# **Selected Consolidated Statement of Operations Data**

The following table sets forth our selected consolidated statement of operations data for each of the three years ended December 31, 2014, 2015 and 2016 expressed as a percentage of net sales.

	Year Ended December 31,		
	2014	2015	2016
Net sales	100%	100%	100%
Cost of sales	(67.4)	(66.3)	(64.5)
Gross profit	32.6	33.7	35.5
Total operating expenses	(21.7)	(21.7)	(21.4)
Operating earnings before other expenses, net	10.9	12.0	14.1
Other expenses, net	(2.5)	(1.4)	(0.7)
Operating earnings	8.4	10.6	13.4
Financial expense	(10.7)	(9.0)	(8.6)
Other financial (expense) income, net	1.3	(0.6)	1.8
Equity in gain of associates	0.1	0.3	0.3
Earnings (loss) before income tax	(0.9)	(1.4)	6.9
Income taxes	(2.0)	(1.1)	(1.2)
Net income (loss) from continuing operations	(2.9)	0.4	5.7
Discontinued operations, net of tax	0.1	0.6	0.4
Consolidated net income (loss)	(2.8)	1.0	6.1
Non-controlling interest net income	0.6	0.5	0.5
Controlling interest net income (loss)	(3.4)	0.5	5.6

### Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Summarized in the table below are the percentage (%) increases (+) and decreases (-) for the year ended December 31, 2016, compared to the year ended December 31, 2015, in our domestic cement and ready-mix concrete sales volumes, as well as export sales volumes of cement and domestic cement and ready-mix concrete average sales prices for each of our geographic segments.

Effective January 1, 2016, according to an announcement made by CEMEX's Chief Executive Officer on December 1, 2015, CEMEX's operations were reorganized into five geographical regions, each under the supervision of a regional president, as follows: (1) Mexico, (2) United States, (3) Europe, (4) SAC and (5) Asia, Middle East and Africa. Under the new organization, the geographical operating segments under the former Mediterranean region were incorporated to the Europe region or the Asia, Middle East and Africa region, as applicable.

The table below and the other volume data presented by geographic segment in this "—Year Ended December 31, 2016 Compared to Year Ended December 31, 2015" section are presented before eliminations resulting from consolidation (including those shown on note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report).

	Domestic Sales Volumes		Export Sales Volumes	Average Domestic Sales Prices in Local Currency(1)	
Geographic Segment	Cement	Ready-Mix Concrete	Cement	Cement	Ready-Mix Concrete
Mexico	+4%	-3%	+22%	+18%	+8%
United States	+2%	+1%	_	+4%	+1%
Europe					
United Kingdom	+7%	-3%	_	+2%	+2%
Germany	Flat	+2%	_	-2%	+1%
France	_	+4%	_	_	-3%
Spain	-3%	+2%	-12%	-2%	-5%
Rest of Europe(2)	-2%	+4%	_	-4%	-4%
South, Central America and the Caribbean					
Colombia	Flat	-8%	_	+1%	+4%
Rest of South, Central America and the					
Caribbean(3)	+2%	-20%	_	-5%	-4%
Asia, Middle East and Africa					
Philippines	+1%	_	-7%	+1%	_
Egypt	+2%	-3%		+3%	+6%
Rest of Asia, Middle East and Africa(4)	-44%	-4%	_	Flat	+3%

<sup>&</sup>quot;—" = Not Applicable

- (1) Represents the average change in domestic cement and ready-mix concrete prices in local currency terms. For purposes of a geographic segment consisting of a region, the average prices in local currency terms for each individual country within the region are first translated into Dollar terms (except for the Rest of Europe, in which they are translated first into Euros) at the exchange rates in effect as of the end of the reporting period. Variations for a region represent the weighted average change of prices in Dollar terms (except for the Rest of Europe, in which they represent the weighted average change of prices in Euros) based on total sales volumes in the region.
- (2) The "Rest of Europe" segment refers primarily to operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland. On October 31, 2015, we completed the sale of our operations in Austria and Hungary. See "Item 4—Information on the Company—Our Corporate Structure— Rest of Europe—Sale of our Operations in Austria and Hungary." The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in our statements of operations, were reclassified to the single line item "Discontinued operations." On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. See "Item 4-Information on the Company—Our Corporate Structure—Rest of Europe—Attempted Sale of our Operations in Southeast Europe." For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued Operations." On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. Due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to

- each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- (3) The "Rest of South, Central America and the Caribbean" segment includes CEMEX's operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina.
- (4) The "Rest of Asia, Middle East and Africa" segment includes the operations in the UAE, Israel and Malaysia. On May 26, 2016, we completed the sale of our operations in Bangladesh and Thailand. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Asia, Middle East and Africa—Sale of our Operations in Rest of Asia, Middle East and Africa." Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.

On a consolidated basis, our cement sales volumes remained flat at 66.7 million tons in 2015 and 2016, and our ready-mix concrete sales volumes decreased approximately 2%, from 52.9 million cubic meters in 2015 to 52.1 cubic meters in 2016. Our net sales increased approximately 14%, from Ps220,326 million in 2015 to Ps250,909 in 2016, and our operating earnings before other expenses, net increased approximately 33%, from Ps26,489 million in 2015 to Ps35,264 in 2016.

The following tables present selected financial information of net sales and operating earnings before other expenses, net for each of our geographic segments for the years ended December 31, 2016 and 2015. The net sales information in the table below is presented before eliminations resulting from consolidation (including those shown in note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report). Variations in net sales determined on the basis of Mexican Pesos include the appreciation or depreciation which occurred during the period between the local currencies of the countries in the regions vis-à-vis the Mexican Peso; therefore, such variations differ substantially from those based solely on the countries' local currencies:

	Variation in Local	Approximate Currency	Variation in	Net Sales For the Year Ended	
Geographic Segment	Currency(1)	Fluctuations	Mexican Pesos	2015	2016
		(in m	illions of Mexican	Pesos)	
Mexico	+7%	_	+7%	Ps 50,260	Ps 53,579
United States	_	+17%	+17%	58,668	68,553
Europe					
United Kingdom	+2%	+3%	+5%	20,227	21,153
Germany	-2%	+18%	+16%	8,285	9,572
France	+3%	+17%	+20%	12,064	14,535
Spain	-9%	+16%	+7%	6,151	6,563
Rest of Europe(2)	-3%	+12%	+9%	10,010	10,881
Rest of South, Central America and the					
Caribbean					
Colombia	+1%	+6%	+7%	11,562	12,415
Rest of South, Central America and the					
Caribbean(3)	-9%	+7%	-2%	19,169	18,820
Asia, Middle East and Africa					
Egypt	+5%	-5%	_	6,923	6,950
Philippines	+2%	+12%	+14%	8,436	9,655
Rest of Asia, Middle East and Africa(4)	-2%	+17%	+15%	11,025	12,676
Others(5)	+15%	-3%	+12%	17,058	19,128
Continuing operations			+10%	Ps 239,838	Ps 264,480
Discontinued operations			-25%	10,918	8,223
Net sales before eliminations			+9%	Ps 250,756	Ps 272,703
Eliminations resulting from					
consolidation				19,569	13,778
Net sales				Ps 231,187	Ps 258,925

	Variation in Approximate in		Variation in Mexican	For the Ye	e Other Expenses, Net or the Year Ended December 31,	
Geographic Segment	Currency(1)	Fluctuations	Pesos	2015	2016	
2.08-nL 2.8		(in million	ıs of Mexicai	Pesos)		
Mexico	+30%	_	+30%	Ps 12,963	Ps 16,866	
United States	+79%	+27%	+106%	2,215	4,554	
Europe						
United Kingdom	+48	-2%	+50%	1,701	2,559	
Germany	-15%	-27%	-42%	153	89	
France	-33%	+13%	-20%	232	185	
Spain	-68%	+3%	-65%	427	151	
Rest of Europe(2)	+18%	-5%	+13%	447	506	
South, Central America and the Caribbean						
Colombia	-7%	+5%	-2%	3,541	3,486	
Rest of South, Central America and the						
Caribbean(3)	+4%	+16%	+20%	4,367	5,234	
Asia, Middle East and Africa						
Egypt	+59%	-5%	+54%	1,241	1,915	
Philippines	+10%	+13%	+23%	1,759	2,157	
Rest of Asia, Middle East and Africa(4)	+13%	+17%	+30%	987	1,282	
<b>Others</b> (5)	+5%	_	+5%	(3,544)	(3,720)	
Operating earnings before other expenses, net from						
continuing operations			+33%	Ps 26,489	Ps 35,264	
Operating earnings before other expenses, net from						
discontinued operations			+34%	610	818	
Total			+33%	Ps 27,099	Ps 36,082	

**Operating Earnings (Loss)** 

- (1) Represents the variation in local currency terms. For purposes of a geographic segment consisting of a region, the variation in local currency terms for each individual country within the region are first translated into Dollar terms (except for the Rest of Europe, in which they are translated first into Euros) at the exchange rates in effect as of the end of the reporting period. Variations for a region represent the change in Dollar terms (except for the Rest Europe region, in which they represent the change in Euros), net, in the region.
- (2) The "Rest of Europe" segment refers primarily to operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland. On October 31, 2015, we completed the sale of our operations in Austria and Hungary. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Sale of our Operations in Austria and Hungary." The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in our statements of operations, were reclassified to the single line item "Discontinued operations." On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Attempted Sale of our Operations in Southeast Europe." For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued Operations." On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. Due to the inability to complete the sale, beginning in the second

<sup>&</sup>quot;-- " = Not Applicable

- quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.
- (3) The "Rest of South, Central America and the Caribbean" segment includes CEMEX's operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina.
- (4) The "Rest of Asia, Middle East and Africa" segment includes the operations in the UAE, Israel and Malaysia. On May 26, 2016, we completed the sale of our operations in Bangladesh and Thailand. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Asia, Middle East and Africa—Sale of our Operations in Rest of Asia, Middle East and Africa." Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.
- (5) The "Others" segment refers to: (i) cement trade maritime operations, (ii) our information technology solutions business (Neoris N.V.), (iii) CEMEX, S.A.B. de C.V. and other corporate entities and (iv)other minor subsidiaries with different lines of business.

Net sales. Our consolidated net sales increased approximately 14%, from Ps220,326 million in 2015 to Ps250,909 million in 2016. The increase was primarily attributable to higher prices of our products, in local currency terms, in most of our operations, as well as higher volumes in our Mexican operations. Set forth below is a quantitative and qualitative analysis of the various factors affecting our net sales on a geographic segment basis. The discussion of volume data and net sales information below is presented before eliminations resulting from consolidation as described in note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# Mexico

Our domestic cement sales volumes from our operations in Mexico increased approximately 4% in 2016 compared to 2015, and ready-mix concrete sales volumes decreased approximately 3% over the same period. Our net sales from our operations in Mexico represented approximately 20% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. The increase in domestic cement sales volumes was primarily attributable to conditions in the industrial/commercial, formal housing and self-construction sectors, as well as our value-before-volume strategy. The industrial/commercial sector was supported by continued commercial activity, as well as warehouse and industrial-park construction. Despite a decline in government subsidies during 2016, the formal residential sector benefited from the *Instituto* del Fondo Nacional de la Vivienda para los Trabajadores' (Infonavit) stable investment and banks' double-digit growth in mortgage lending. The main indicators for the self-construction sector, including remittances and job creation, remained solid during the year. Our cement export volumes from our operations in Mexico, which represented approximately 4% of our Mexican cement sales volumes for the year ended December 31, 2016, increased approximately 22% in 2016 compared to 2015. Of our total cement export volumes from our operations in Mexico during 2016, 46% was shipped to the United States, 41% to Central America and the Caribbean and 13% to South America. Our average sales price of domestic cement from our operations in Mexico increased approximately 18%, in Mexican Peso terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete also increased approximately 8%, in Mexican Peso terms, over the same period. For the year ended December 31, 2016, cement represented approximately 57%, ready-mix concrete approximately 21% and our aggregates and other businesses approximately 22% of our net sales in Mexican Peso terms from our operations in Mexico before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of increases in domestic cement sales volumes and domestic cement and ready-mix concrete sales prices, partially offset by a decrease in ready-mix concrete sales volumes, our net sales in Mexico, in Mexican Peso terms, increased approximately 7% in 2016 compared to 2015.

### **United States**

Our domestic cement sales volumes from our operations in the United States increased approximately 2% in 2016 compared to 2015, and ready-mix concrete sales volumes increased approximately 1% over the same period. The increases in the domestic cement and ready mix concrete sales volume of our operation in the United States were mainly driven by the residential, construction and infrastructure sectors. The residential sector was supported by low interest rates and inventories, strong job creation and household formation. Construction spending for the cement-intensive segments in the industrial/commercial sector increased in 2016, which reflected growth in the lodging and office segments, offsetting a decline in energy, agriculture and manufacturing. In the infrastructure sector, streets-and-highways spending picked up toward the end of the year after a weak pre-election performance. Our operations in the United States represented approximately 26% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average domestic cement sales prices of our operations in the United States increased approximately 4%, in Dollar terms, in 2016 compared to 2015, and our average ready-mix concrete sales price increased approximately 1%, in Dollar terms, over the same period. For the year ended December 31, 2016, cement represented approximately 32%, ready-mix concrete approximately 41% and our aggregates and other businesses approximately 27% of net sales in Mexican Peso terms from our operations in the United States before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and sales prices, completely offset by a decrease in our other segments, net sales from our operations in the United States, in Dollar terms, remained flat in 2016 compared to 2015.

#### Europe

In 2016, our operations in the Europe region consisted of our operations in the United Kingdom, Germany, France and Spain, which represent the most significant operations in this region, in addition to the Rest of Europe, which refers primarily to operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland. Our net sales from our operations in the Europe region represented approximately 23% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in the Europe region represented approximately 18% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Europe region.

# United Kingdom

Our domestic cement sales volumes from our operations in the United Kingdom increased approximately 7% in 2016 compared to 2015, and ready-mix concrete sales volumes decreased approximately 3% over the same period. The increase in domestic cement sales volumes resulted primarily from improvements in all of our main demand sectors. In addition, cement volume growth during the year benefited from higher sales of blended cement that resulted from fly ash scarcity. Our operations in the United Kingdom represented approximately 8% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the United Kingdom increased approximately 2%, in Pound terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete increased approximately 2%, in Pound terms, over the same period. For the year ended December 31, 2016, cement represented approximately 18%, ready-mix concrete approximately 27% and our aggregates and other businesses approximately 55% of net sales in Mexican Peso terms from our operations in the United Kingdom before intrasector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and sales prices and ready-mix concrete sales prices, partially offset by a decrease in ready-mix concrete sales volumes, net sales from our operations in the United Kingdom, in Pound terms, increased approximately 2% in 2016 compared to 2015.

## Germany

Our domestic cement sales volumes from our operations in Germany remained flat in 2016 compared to 2015, and ready-mix concrete sales volumes increased approximately 2% over the same period. Competitive dynamics improved during 2016. The residential sector was the main driver of cement consumption despite capacity constraints in the local construction industry and public authorities' restrictions. This sector continued to benefit from low unemployment and mortgage rates, rising purchasing power and growing immigration. Our cement export volumes from our operations in Germany, which represented approximately 37% of our cement sales volumes in Germany for the year ended December 31, 2016, decreased approximately 6% in 2016 compared to 2015. Our operations in Germany represented approximately 4% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in Germany decreased approximately 2%, in Euro terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete increased approximately 1%, in Euro terms, over the same period. For the year ended December 31, 2016, cement represented approximately 28%, ready-mix concrete approximately 37% and our aggregates and other businesses approximately 35% of net sales in Mexican Peso terms from our operations in Germany before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decrease in domestic cement sales prices, partially offset by the increases in ready-mix concrete sales prices and sales volumes, net sales from our operations in Germany, in Euro terms, decreased approximately 2% in 2016 compared to 2015.

## France

Our ready-mix concrete sales volumes from our operations in France increased approximately 4% in 2016 compared to 2015. The increase in ready-mix concrete sales volumes resulted primarily from improvements in the residential and industrial/commercial sectors, which were the main drivers of demand during the year. The residential sector was supported by low interest rates and government initiatives, including a buy-to-let program and zero-rates loans for first time buyers. Our operations in France represented approximately 5% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of ready-mix concrete of our operations in France decreased approximately 3%, in Euro terms, in 2016 compared to 2015. For the year ended December 31, 2016, ready-mix concrete represented approximately 67% and our aggregates and other businesses approximately 33% of net sales in Mexican Peso terms from our operations in France before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in ready-mix concrete sales volumes, partially offset by the decrease in ready-mix concrete sales prices, net sales from our operations in France, in Euro terms, increased approximately 3% in 2016 compared to 2015.

# Spain

Our domestic cement sales volumes from our operations in Spain decreased approximately 3% in 2016 compared to 2015, while ready-mix concrete sales volumes increased approximately 2% over the same period. Political uncertainty for most of 2016 weighed on consumer sentiment, and the construction activity was particularly negatively affected during 2016. The residential sector, which was the main driver of cement demand during the year, benefited from favorable credit conditions and income prospects, job creation, and pent-up housing demand. Our operations in Spain represented approximately 2% of our total net sales for the year ended

December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our cement export volumes from our operations in Spain, which represented approximately 58% of our Spain cement sales volumes for the year ended December 31, 2016, decreased approximately 12% in 2016 compared to 2015. Of our total cement export volumes from our operations in Spain during 2016, approximately 5% were to Central America and the Caribbean, approximately 6% were to South America, approximately 16% were to the United States, approximately 19% were to Europe and the Middle East and approximately 53% were to Africa. Our average sales price of domestic cement of our operations in Spain decreased approximately 2%, in Euro terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete decreased approximately 5%, in Euro terms, over the same period. For the year ended December 31, 2016, cement represented approximately 79%, ready-mix concrete approximately 12% and our aggregates and other businesses approximately 9% of net sales from our operations in Spain before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in domestic cement sales volumes and domestic cement and ready-mix concrete sales prices, partially offset by an increase in ready-mix concrete sales volumes, net sales from our operations in Spain, in Euro terms, decreased approximately 9% in 2016 compared to 2015.

## Rest of Europe

Our domestic cement sales volumes from our operations in the Rest of Europe decreased approximately 2% in 2016 compared to 2015, and ready-mix concrete sales volumes increased approximately 4% over the same period. The decreases in domestic cement sales volumes were primarily due delays in infrastructure sector projects in our operations in the Rest of Europe. The residential sector was the main driver of demand during the year. Our cement export volumes from our operations in the Rest of Europe segment, which represented approximately 13% of our Rest of Europe cement sales volumes for the year ended December 31, 2016, decreased approximately 36% in 2016 compared to 2015. Our net sales from our operations in the Rest of Europe represented approximately 4% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the Rest of Europe decreased approximately 4%, in Euro terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete decreased approximately 4%, in Euro terms, over the same period. For the year ended December 31, 2016, cement represented approximately 51%, ready-mix concrete approximately 33% and our aggregates and other businesses approximately 16% of net sales in Mexican Peso terms from our operations in the Rest of Europe before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in domestic cement and ready-mix concrete sales prices and domestic cement sales volumes, partially offset by the increases in ready-mix concrete sales prices, net sales in the Rest of Europe, in Euro terms, decreased approximately 3% in 2016 compared to 2015.

# South, Central America and the Caribbean

In 2016, our operations in the SAC region consisted of our operations in Colombia, which represents the most significant operations in this region, in addition to the Rest of SAC, which refers primarily to operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina. Some of these trading operations in the Caribbean region consist of the resale of cement produced by our operations in Mexico. Our net sales from our operations in the SAC region represented approximately 12% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in the SAC region represented approximately 8% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the SAC region.

### Colombia

Our domestic cement sales volumes from our operations in Colombia remained flat in 2016 compared to 2015, and ready-mix concrete sales volumes decreased approximately 8% over the same period. The decrease in ready-mix concrete sales volumes was primarily due to delays and macroeconomic challenges that adversely affected national consumption during 2016. Our net sales from our operations in Colombia represented approximately 5% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in Colombia increased approximately 1%, in Colombian Peso terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete increased approximately 4%, in Colombian Peso terms, over the same period. For the year ended December 31, 2016, cement represented approximately 54%, ready-mix concrete approximately 27% and our aggregates and other businesses approximately 19% of our net sales from our operations in Colombia before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales prices, partially offset by the decrease in ready-mix concretes sales volumes, net sales of our operations in Colombia, in Colombian Peso terms, increased approximately 1% in 2016 compared to 2015.

# Rest of South, Central America and the Caribbean

Our domestic cement volumes from our operations in the Rest of SAC increased 2% in 2016 compared to 2015, and ready-mix concrete sales volumes decreased approximately 20% over the same period. Our net sales from our operations in the Rest of SAC represented approximately 7% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our cement export volumes from our operations in the Rest of SAC segment, which represented approximately 12% of our Rest of SAC cement sales volumes for the year ended December 31, 2016, decreased approximately 19% in 2016 compared to 2015. Our average sales price of domestic cement from our operations in the Rest of SAC decreased approximately 5% in Dollar terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete decreased approximately 4%, in Dollar terms, over the same period. For the year ended December 31, 2016, cement represented approximately 77%, ready-mix concrete approximately 16% and our other businesses approximately 7% of net sales from our operations in the Rest of SAC before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in ready-mix concrete sales volumes and sales prices and domestic cement sales prices, partially offset by the increase in domestic cement sales volumes, net sales of our operations in the Rest of SAC, in Dollar terms, decreased approximately 9% in 2016 compared to 2015.

## Asia, Middle East and Africa

For the year ended December 31, 2016, our operations in the Asia, Middle East and Africa region consisted of our operations in Egypt and the Philippines, which represent the most significant operations in this region, in addition to the Rest of Asia, Middle East and Africa, which refers primarily to operations in the UAE, Israel and Malaysia. Our net sales from our operations in the Asia, Middle East and Africa region represented approximately 12% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2016, our operations in the Asia, Middle East and Africa region represented approximately 5% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Asia, Middle East and Africa region.

# Egypt

Our domestic cement sales volumes from our operations in Egypt increased approximately 2% in 2016 compared to 2015, while ready-mix concrete sales volumes decreased approximately 3% over the same period.

The decrease in ready-mix concrete sales volumes resulted primarily from the currency depreciation, which triggered inflation and reduced purchasing power. Our net sales from our operations in Egypt represented approximately 3% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms. Our average sales price of domestic cement increased approximately 3%, in Egyptian Pound terms, in 2016 compared to 2015, and our average sales price of ready-mix concrete increased approximately 6%, in Egyptian Pound terms, over the same period. For the year ended December 31, 2016, cement represented approximately 84%, ready-mix concrete approximately 13% and our aggregates and other businesses approximately 3% of net sales in Mexican Peso terms from our operations in Egypt before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and sales prices and ready-mix concrete sales prices, partially offset by the decreases in ready-mix concrete sales volumes, our net sales in Egypt, in Egyptian Pound terms, increased approximately 5% in 2016 compared to 2015.

# The Philippines

Our domestic cement sales volumes from our operations in the Philippines increased approximately 1% in 2016 compared to 2015. The increase in our domestic cement sales volumes resulted primarily from moderation in cement consumption, especially in infrastructure, due to the post-election government transition. Our cement export volumes from our operations in Philippines, which represented less than 1% of our Philippines cement sales volumes for the year ended December 31, 2016, decreased approximately 7% in 2016 compared to 2015. Our net sales from our operations in the Philippines represented approximately 4% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the Philippines increased approximately 1% in Philippine Peso terms, in 2016 compared to 2015. For the year ended December 31, 2016, cement represented approximately 96% and our other businesses approximately 4% of our net sales in Mexican Peso terms from our operations in the Philippines before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and sales prices, net sales of our operations in the Philippines, in Philippine Peso terms, increased approximately 2% in 2016 compared to 2015.

### Rest of Asia, Middle East and Africa

Our domestic cement sales volumes from our operations in the Rest of Asia, Middle East and Africa decreased approximately 44% in 2016 compared to 2015, and ready-mix concrete sales volumes decreased approximately 4% over the same period. The decrease in our domestic cement sales volumes resulted primarily from a decrease in our sales volumes in our UAE operations. The decrease in our ready-mix concrete sales volumes resulted primarily from a decrease in our sales volumes ready-mix concrete sales volumes in our Malaysian operations. Our net sales from our operations in our Rest of Asia segment represented approximately 5% of our total net sales for the year ended December 31, 2016, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement remained flat in Dollar terms, in 2016 compared to 2015, and the average sales price of ready-mix concrete increased approximately 3%, in Dollar terms, over the same period. For the year ended December 31, 2016, cement represented approximately 6%, ready-mix concrete approximately 68% and our other businesses approximately 26% of net sales from our operations in the Rest of Asia, Middle East and Africa before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increase in ready-mix concrete sales volumes, partially offset by decreases in domestic cement and ready-mix concrete sales prices, net sales from our operations in the Rest of Asia, Middle East and Africa, in Dollar terms, increased approximately 15% in 2016 compared to 2015.

### Others

Our Others segment refers to: (i) cement trade maritime operations, (ii) our information technology solutions business (Neoris N.V.), (iii) CEMEX, S.A.B. de C.V. and other corporate entities and (iv) other minor subsidiaries with different lines of business. Net sales from our Others segment increased approximately 15% before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable, in 2016 compared to 2015, in Dollar terms. The increase resulted primarily from an increase in our worldwide cement volume of our trading operations. For the year ended December 31, 2016, our information technology solutions company represented approximately 30% and our trading operations represented approximately 32% of our net sales in our Others segment, in Dollar terms.

Cost of Sales. Our cost of sales, including depreciation, increased approximately 11% from Ps146,068 million in 2015 to Ps161,883 million in 2016. As a percentage of net sales, cost of sales decreased from 66.3% in 2015 to 64.5% in 2016. The decrease in cost of sales as a percentage of net sales was mainly driven by our cost reduction initiatives. Our cost of sales includes freight expenses of raw materials used in our producing plants.

Gross Profit. For the reasons explained above, our gross profit increased approximately 20% from approximately Ps74,258 million in 2015 to approximately Ps89,026 million in 2016. As a percentage of net sales, gross profit increased from approximately 33.7% in 2015 to 35.5% in 2016. In addition, our gross profit may not be directly comparable to those of other entities that include all their freight expenses in cost of sales. As described above, we include freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers' locations within distribution expenses, which in aggregate represented costs of approximately Ps23,109 million in 2015 and approximately Ps25,925 million in 2016. As a percentage of net sales, distribution and logistics expenses decreased from approximately 10.5% in 2015 to 10.3% in 2016.

Operating expenses. Our operating expenses, which are represented by administrative, selling and distribution and logistics expenses, increased approximately 12.5%, from approximately Ps47,769 million in 2015 to approximately Ps53,762 million in 2016. As a percentage of net sales, operating expenses decreased from approximately 21.7% in 2015 to 21.4% in 2016. Our operating expenses include expenses related to personnel, equipment and services involved in sales activities and storage of product at points of sale, which are included as part of the administrative and selling expenses, as well as freight expenses of finished products between plants and points of sale and freight expenses between points of sale and the customers' facilities, which are included as part of the distribution expenses line item. For the years ended December 31, 2015 and 2016, selling expenses included as part of the selling and administrative expenses line item amounted to approximately Ps5,943 million and Ps6,954 million, respectively. As mentioned before, we include freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers' locations within distribution expenses, which in aggregate represented costs of approximately Ps23,109 million in 2015 and approximately Ps25,925 million in 2016. As a percentage of net sales, distribution and logistics expenses decreased from approximately 10.5% in 2015 to 10.3% in 2016.

## Operating Earnings Before Other Expenses, Net

For the reasons mentioned above, our operating earnings before other expenses, net increased approximately 33.1% from approximately Ps26,489 million in 2015 to approximately Ps35,264 million in 2016. As a percentage of net sales, operating earnings before other expenses, net increased from approximately 12.0% in 2015 to 14.1% in 2016. Additionally, set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our operating earnings before other expenses, net on a geographic segment basis.

## Mexico

Our operating earnings before other expenses, net, from our operations in Mexico increased approximately 30%, in Mexican Peso terms, from operating earnings before other expenses, net, of approximately

Ps12,963 million in 2015 to operating earnings before other expenses, net, of approximately Ps16,866 million in 2016. The increase resulted primarily from higher contributions in our products, as well as an increase in domestic cement sales volumes.

### **United States**

Our operating earnings before other expenses, net, from our operations in the United States increased significantly in Dollar terms. The increase in operating earnings before other expenses, net resulted primarily from an increase in net sales due to higher sales prices and sales volumes during 2016 compared to 2015.

## Europe

*United Kingdom*. Our operating earnings before other expenses, net, from our operations in the United Kingdom increased approximately 48% in Pound terms. The increase resulted primarily from our cost reduction initiatives and an increase in net sales.

*Germany*. Our operating earnings before other expenses, net, from our operations in Germany decreased approximately 15% in Euro terms. The decrease resulted primarily from a decrease in net sales.

*France*. Our operating earnings before other expenses, net, from our operations in France decreased approximately 33% in Euro terms. The decrease in our operating earnings before other expenses, net in France resulted primarily from higher maintenance costs.

*Spain.* Our operating earnings before other expenses, net, from our operations in Spain decreased approximately 68% in Euro terms. The decrease in the operating earnings before other expenses, net, resulted primarily from a decrease in net sales.

*Rest of Europe*. Our operating earnings before other expenses, net, from our operations in the Rest of Europe increased approximately 18% in Euro terms. The increase resulted primarily from our improved operating efficiencies in our Rest of Europe region.

# South, Central America and the Caribbean

Colombia. Our operating earnings before other expenses, net, from our operations in Colombia decreased approximately 7% in Colombian Peso terms. The decrease resulted primarily from increases in electricity rates and higher maintenance costs.

Rest of South, Central America and the Caribbean. Our operating earnings before other expenses, net, from our operations in the Rest of SAC increased approximately 4% in Dollar terms. The increase resulted primarily from an increase in net sales.

# Asia, Middle East and Africa

*Egypt.* Our operating earnings before other expenses, net, from our operations in Egypt increased 59% in Egyptian Pound terms. The increase resulted primarily from an increase in net sales.

*The Philippines*. Our operating earnings before other expenses, net, from our operations in the Philippines increased approximately 10% in Philippine Peso terms. The increase resulted primarily from an increase in net sales.

Rest of Asia, Middle East and Africa. Our operating earnings before other expenses, net, from our operations in the Rest of Asia, Middle East and Africa increased approximately 13% in Dollar terms. The increase resulted primarily from our cost reduction initiatives and operating efficiencies.

*Others*. Our operating loss before other expenses, net, from our operations in our Others segment increased approximately 5% in Dollar terms. The increase in our operating loss resulted primarily from an increase in net sales.

Other Expenses, Net. Our other expenses, net, decreased approximately 46%, in Mexican Peso terms, from Ps3,043 million in 2015 to Ps1,646 million in 2016. The decrease resulted primarily from a decrease in our impairment losses during 2016 compared to 2015, as well as gains resulting from the sale of assets. As a percentage of net sales, Other expenses, net, decreased from approximately 1.4% in 2015 to 0.7% in 2016. See notes 13B, 14, 15 and 24A to our 2016 audited consolidated financial statements included elsewhere in this annual report. The most significant items included under this caption for the years ended December 31, 2015 and 2016 are as follows:

	For the Year Ended December 31			
	2015	2016		
	(in millions of I	Mexican Pesos)		
Impairment losses and effects from assets held for sale	Ps (1,526)	Ps (2,516)		
Restructuring costs	(845)	(778)		
Charitable contributions	(60)	(93)		
Results from the sale of assets and others, net	(612)	1,741		
	Ps (3,043)	<u>Ps (1,646)</u>		

### Financial Items

Pursuant to IFRS, financial items include:

- financial or interest expense on borrowed funds;
- financial income on cash and cash equivalents;
- changes in the fair value resulting from the valuation of financial instruments, including derivative instruments and marketable securities;
- foreign exchange gains or losses associated with monetary assets and liabilities denominated in foreign currencies; and
- accretion result from assets and liabilities and others.

	For the Year Ended December 31		
	2015	2016	
	(in millions of I	Mexican Pesos)	
Financial items:			
Financial expense	Ps (19,767)	Ps (21,468)	
Other financial income, net:			
Financial income	315	417	
Results from financial instruments	(2,729)	113	
Foreign exchange results	2,083	4,943	
Effects of net present value on assets and liabilities and others, net	(904)	(1,032)	
	Ps (21,002)	<u>Ps (17,027)</u>	

Our financial items in 2016, which comprises financial expense and other financial income, net, as reported in our statements of operations, decreased 18.9% from a loss of Ps21,002 million in 2015 to a loss of Ps17,027 million in 2016. The components of the change are shown above.

Our financial expense increased approximately 8.6%, from Ps19,767 million in 2015 to Ps21,468 million in 2016, primarily attributable to depreciation of the Mexican Peso against the U.S. Dollar. See notes 16A and 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our other financial income, net increased approximately 32.4%, from Ps315 million in 2015 to Ps417 million in 2016. Our results from financial instruments decreased significantly from a loss of Ps2,729 million in 2015 to a gain of Ps113 million in 2016, primarily attributable to derivatives related to CEMEX, S.A.B. de C.V.'s shares. Our foreign exchange results increased 137%, from a gain of approximately Ps2,083 million in 2015 to a gain of approximately Ps4,943 million in 2016. The increase was primarily attributable to the fluctuation of the Mexican Peso against the U.S. Dollar. The accretion expense, which represents the effects on our net assets and liabilities recognized at amortized cost due to the passage of time, increased by approximately 14% from an expense of Ps904 million in 2015 to Ps1,032 million in 2016.

Derivative Financial Instruments. For the years ended December 31, 2015 and 2016, our derivative financial instruments that had a potential impact on our other financial income, net consisted of interest rate swaps, equity forward in third-party shares contracts, options on CEMEX, S.A.B. de C.V.'s own shares, foreign exchange contracts and derivatives related to energy projects, as discussed in note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

For the year ended December 31, 2016, our loss from our financial instruments decreased significantly for the reasons described above. See "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Our Equity Forward Arrangements."

*Income Taxes*. Our income tax effect in the statement of operations, which is primarily comprised of current income taxes plus deferred income taxes, increased approximately 33% from an expense of Ps2,328 million in 2015 to an expense of Ps3,096 million in 2016.

The increase in the income tax expense is mainly attributable to several factors discussed below. See notes 19A and 19D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our current income tax increased from an income of Ps6,149 million in 2015 to an expense of Ps3,448 million in 2016. The increase in our current income tax expense in 2016 resulted primarily from a one-time benefit of approximately Ps12.3 billion recognized in 2015 resulting from the reduction of income tax accounts payable accrued in prior years related to the disconnection of the tax consolidation regime in Mexico pursuant to the income tax reform approved by the Mexican Congress in 2015. Such increase was partially offset by the significant devaluation of the Mexican Peso during 2016. See notes 19B and 19D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our deferred income tax decreased from an expense of Ps8,477 million in 2015 to an income of Ps352 million in 2016. The decrease in our deferred income tax income in 2016 resulted primarily from an expense of approximately Ps5.9 billion recognized in 2015 attributable to the reduction of our deferred tax assets from tax loss carryforwards and also as a consequence of the changes resulting from the income tax reform in Mexico mentioned above, which allowed us to settle a portion of the income tax accounts payable related to the disconnection of the tax consolidation regime using the aforementioned deferred tax assets. Such decrease was partially offset by an increase in our deferred tax assets in 2016 of approximately Ps856 million related primarily from the effects of foreign currency results. See notes 19B and 19D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

For each of the years ended December 31, 2015 and 2016, our statutory income tax rate in Mexico was 30%. Our effective tax rate in 2015, which is determined as described below, resulted in an income tax rate of 73.2%, considering a gain before income tax of approximately Ps3,182 million, and our effective tax rate in 2016 resulted in an income tax rate of 17.9%, considering a gain before income tax of approximately Ps17,279 million.

See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—Certain tax matters may have an adverse effect on our cash flow, financial condition and net income."

*Net Income from continuing operations.* For the reasons described above, our net income from continuing operations for 2016 increased significantly from a net income from continuing operations of Ps854 million in 2015 to a net income from continuing operations of Ps14,183 million in 2016.

Discontinued operations, net of tax. For the years ended December 31, 2015 and 2016, our discontinued operations included in our consolidated statements of operations amounted to Ps1,279 million and Ps1,024 million, respectively. As a percentage of net sales, discontinued operations, net of tax, represented 0.6% for the year ended as of December 31, 2015 and 0.4% for the year ended as of December 31, 2016. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Consolidated Net Income (Loss). For the reasons described above, our consolidated net income (before deducting the portion allocable to non-controlling interest) for 2016 increased significantly from a consolidated net income of approximately Ps2,133 million in 2015 to a consolidated net income of approximately Ps15,207 million in 2016.

Non-controlling Interest Net Income. Changes in non-controlling interest net income in any period reflect changes in the percentage of the stock of our subsidiaries held by non-associated third parties as of the end of each month during the relevant period and the consolidated net loss attributable to those subsidiaries. Non-controlling interest net income increased, from a gain of Ps932 million in 2015 to a gain of Ps1,174 million in 2016, primarily attributable to an increase in the net income of the consolidated entities in which others have a non-controlling interest and for the increase in our non-controlling interest in our Philippines operations through CHP. See note 20D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Controlling Interest Net Income (Loss). Controlling interest net income represents the difference between our consolidated net income and non-controlling interest net income, which is the portion of our consolidated net loss attributable to those of our subsidiaries in which non-associated third parties hold interests. For the reasons described above, our controlling interest net income increased significantly from a net income of approximately Ps1,201 million in 2015 to a controlling interest net income of approximately Ps14,033 million in 2016.

# Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

Summarized in the table below are the percentage (%) increases (+) and decreases (-) for the year ended December 31, 2015, compared to the year ended December 31, 2014, in our domestic cement and ready-mix concrete sales volumes, as well as export sales volumes of cement and domestic cement and ready-mix concrete average sales prices for each of our geographic segments. The table below and the other volume data presented by geographic segment in this "— Year Ended December 31, 2015 Compared to Year Ended December 31, 2014" section are presented before eliminations resulting from consolidation (including those shown on note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report).

	Domestic S	Sales Volumes	Export Sales Volumes		omestic Sales cal Currency(1)
Geographic Segment	Cement	Ready-Mix Concrete	Cement	Cement	Ready-Mix Concrete
Mexico	+1%	-5%	-45%	+10%	+7%
United States	+2%	+13%	_	+6%	+5%
Europe					
United Kingdom	+7%	-2%	_	+4%	+5%
Germany	-47%	-45%	-24%	+7%	+2%
France	_	-5%	_	_	-2%
Spain	+35%	-18%	+19%	+1%	+12%
Rest of Europe(2)	+28%	+14%	-17%	-22%	-17%
South, Central America and the Caribbean					
Colombia	-9%	-3%	_	+8%	+6%
Rest of South, Central America and the					
Caribbean(3)	Flat	-2%	+3%	-5%	-1%
Asia, Middle East and Africa					
Egypt	-9%	+48%	_	-5%	+12%
Philippines	+21%	_	-11%	+3%	_
Rest of Asia, Middle East and Africa(4)	-5%	-11%	_	-7%	-15%

<sup>&</sup>quot;-- " = Not Applicable

- (1) Represents the average change in domestic cement and ready-mix concrete prices in local currency terms. For purposes of a geographic segment consisting of a region, the average prices in local currency terms for each individual country within the region are first translated into Dollar terms (except for the Rest of Europe, in which they are translated first into Euros) at the exchange rates in effect as of the end of the reporting period. Variations for a region represent the weighted average change of prices in Dollar terms (except for the Rest of Europe, in which they represent the weighted average change of prices in Euros) based on total sales volumes in the region.
- (2) The "Rest of Europe" segment refers primarily to operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland. On October 31, 2015, we completed the sale of our operations in Austria and Hungary. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Sale of our Operations in Austria and Hungary." The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in our statements of operations, were reclassified to the single line item "Discontinued operations." On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Attempted Sale of our Operations in Southeast Europe." For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued Operations." On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in

Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. Due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

- (3) The "Rest of South, Central America and the Caribbean" segment includes CEMEX's operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina.
- (4) The "Rest of Asia, Middle East and Africa" segment includes the operations in the UAE, Israel and Malaysia. On May 26, 2016, we completed the sale of our operations in Bangladesh and Thailand. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Asia, Middle East and Africa—Sale of our Operations in Rest of Asia, Middle East and Africa." Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.

On a consolidated basis, our cement sales volumes increased approximately 1%, from 65.6 million tons in 2014 to 66.7 million tons in 2015, and our ready-mix concrete sales volumes decreased approximately 1%, from 53.6 million cubic meters in 2014 to 52.9 million cubic meters in 2015. Our net sales increased approximately 10.2%, from Ps199,942 million in 2014 to Ps220,326 million in 2015, and our operating earnings before other expenses, net increased approximately 21.2%, from Ps21,853 million in 2014 to Ps26,489 million in 2015. The following tables present selected financial information of net sales and operating earnings before other expenses, net for each of our geographic segments for the years ended December 31, 2015 and 2014. The net sales information in the table below is presented before eliminations resulting from consolidation (including those shown in note 4C to our 2016 audited consolidated financial statements included elsewhere in this annual report). Variations in net sales determined on the basis of Mexican Pesos include the appreciation or depreciation which occurred during the period between the local currencies of the countries in the regions vis-à-vis the Mexican Peso; therefore, such variations differ substantially from those based solely on the countries' local currencies:

	Variation in Local	Approximate Currency	Variation in Mexican	Net Sales For the Year Ended	
Geographic Segment	Currency(1)	Fluctuations	Pesos	2014	2015
		(in mill	lions of Mexica	n Pesos)	
Mexico	-2%	_	-2%	Ps 51,412	Ps 50,260
United States	+7%	+21%	+28%	45,691	58,668
Europe					
United Kingdom	+7%	+11%	+18%	17,071	20,227
Germany	-41%		-41%	14,138	8,285
France	-6%	-1%	-7%	12,914	12,064
Spain	+31%	-1%	+30%	4,717	6,151
Rest of Europe(2)	+7%	+3%	+10%	9,101	10,010
Rest of South, Central America and the					
Caribbean					
Colombia	Flat	-13%	-13%	13,242	11,562
Rest of South, Central America and the					
Caribbean(3)	-3%	+21%	+18%	16,292	19,169
Asia, Middle East and Africa					
Egypt	-11%	+8%	-3%	7,123	6,923
Philippines	+23%	+20%	+43%	5,912	8,436
Rest of Asia, Middle East and Africa(4)	-5%	+19%	+14%	9,694	11,025
Others(5)	+30%	-4%	+26%	13,531	17,058
Continuing operations			+9%	Ps 220,838	Ps 239,838
Discontinued operations			+8%	10,134	10,918
Net sales before consolidation			+9%	Ps 230,972	Ps 250,756
Eliminations resulting from consolidation				20,949	19,569
Net sales				Ps 210,023	Ps 231,187

	Variation in Local	Approximate Currency	Variation in Mexican	(Loss) Before Other Expenses, Net For the Year Ended December 31,	
Geographic Segment	Currency(1)	Fluctuations	Pesos	2014	2015
		(in million	s of Mexica	n Pesos)	
Mexico	+17%	_	+17%	Ps 11,060	Ps 12,963
United States	+718%	+21%	+763%	(334)	2,215
Europe					
United Kingdom	+127%	+28%	+155%	668	1,701
Germany	-50%	+13%	-37%	244	153
France	-31%	_	-31%	336	232
Spain	+302%	+3%	+305%	(208)	427
Rest of Europe(2)	-13%	+21%	+8%	413	447
South, Central America and the Caribbean					
Colombia	-6%	-13%	-19%	4,362	3,541
Rest of South, Central America and the Caribbean(3)	-14%	+21%	+7%	4,079	4,367
Asia, Middle East and Africa					
Egypt	-48%	+5%	-43%	2,190	1,241
Philippines	+46%	+24%	+70%	1,036	1,759
Rest of Asia, Middle East and Africa(4)	-3%	+20%	+17%	844	987
Others(5)	+7%	+18%	+25%	(2,837)	(3,544)
Operating earnings before other expenses, net from					
continuing operations			+21%	Ps 21,853	Ps 26,489
Operating earnings before other expenses, net from					
discontinued operations			+84%	331	610
Total			+22%	Ps 22,184	Ps 27,099

**Operating Earnings** 

- (1) Represents the variation in local currency terms. For purposes of a geographic segment consisting of a region, the variation in local currency terms for each individual country within the region are first translated into Dollar terms (except for the Rest of Europe, in which they are translated first into Euros) at the exchange rates in effect as of the end of the reporting period. Variations for a region represent the change in Dollar terms (except for the Rest Europe region, in which they represent the change in Euros), net, in the region.
- (2) The "Rest of Europe" segment refers primarily to operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland. On October 31, 2015, we completed the sale of our operations in Austria and Hungary. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Sale of our Operations in Austria and Hungary." The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in our statements of operations, were reclassified to the single line item "Discontinued operations." On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Europe—Attempted Sale of our Operations in Southeast Europe." For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued Operations." On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and

<sup>&</sup>quot;—" = Not Applicable

Herzegovina, Montenegro and Serbia. Due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

- (3) The "Rest of South, Central America and the Caribbean" segment includes CEMEX's operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala and small ready-mix concrete operations in Argentina.
- (4) The "Rest of Asia, Middle East and Africa" segment includes the operations in the UAE, Israel and Malaysia. On May 26, 2016, we completed the sale of our operations in Bangladesh and Thailand. See "Item 4—Information on the Company—Our Corporate Structure—Rest of Asia, Middle East and Africa—Sale of our Operations in Rest of Asia, Middle East and Africa." Our operations in Bangladesh and Thailand for the five-month period ended May 30, 2016 and the years ended December 31, 2015 and 2014 included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations," which includes, in 2016, a gain on sale of approximately U.S.\$24 million (Ps424 million). See note 4A to our consolidated financial statements included elsewhere in this annual report.
- (5) The "Others" segment refers to: (i) cement trade maritime operations, (ii) our information technology solutions business (Neoris N.V.), (iii) CEMEX, S.A.B. de C.V. and other corporate entities and (iv)other minor subsidiaries with different lines of business.

Net sales. Our consolidated net sales increased approximately 10%, from Ps199,942 million in 2014 to Ps220,326 million in 2015. The increase was primarily attributable to higher prices of our products, in local currency terms, in most of our operations, as well as higher volumes in the U.S., and our Mediterranean and Asia regions. Set forth below is a quantitative and qualitative analysis of the various factors affecting our net sales on a geographic segment basis. The discussion of volume data and net sales information below is presented before eliminations resulting from consolidation as described in note 4B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

## Mexico

Our domestic cement sales volumes from our operations in Mexico increased approximately 1% in 2015 compared to 2014, and ready-mix concrete sales volumes decreased approximately 5% over the same period. Our net sales from our operations in Mexico represented approximately 21% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our volumes were impacted by our focus on our value-before-volume strategy and on profitability. The industrial/commercial sector was the main driver of the increase in our domestic cement volumes during 2015. The formal residential sector also had a positive performance during 2015, supported by credit growth from private banks and public entities. Our cement export volumes from our operations in Mexico, which represented approximately 3% of our Mexican cement sales volumes for the year ended December 31, 2015, decreased approximately 45% in 2015 compared to 2014. Of our total cement export volumes from our operations in Mexico during 2015, approximately 38% was shipped to the United States, approximately 34% to Central America and the Caribbean and approximately 28% to South America. Our average sales price of domestic cement from our operations in Mexico increased approximately 10%, in Mexican Peso terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete also increased approximately 7%, in Mexican Peso terms, over the same period. For the year ended December 31, 2015, cement represented approximately 54%, ready-mix concrete approximately 23% and our aggregates and other businesses approximately 23% of our net sales in Mexican Peso terms from our operations in Mexico before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of a decrease in ready-mix sales volumes, partially offset by the increases in domestic cement and ready-mix concrete sales prices and domestic cement sales volumes, our net sales in Mexico, in Mexican Peso terms, decreased approximately 2% in 2015 compared to 2014.

## **United States**

Our domestic cement sales volumes from our operations in the United States increased approximately 2% in 2015 compared to 2014, and ready-mix concrete sales volumes increased approximately 13% over the same period. The increases in domestic cement and ready-mix concrete sales volumes from our operations in the United States were driven by increased demand from improvements in the residential and infrastructure sectors. Housing starts increased in 2015, driven by low levels of inventories, job creation and increased household formation. In the infrastructure sector, the levels of activity increased during 2015. The industrial/commercial sector, excluding oil well activity, continued its growth, supported by lodging and office construction spending. Our operations in the United States represented approximately 24% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average domestic cement sales prices of our operations in the United States increased approximately 6%, in Dollar terms, in 2015 compared to 2014, and our average ready-mix concrete sales price increased approximately 5%, in Dollar terms, over the same period. For the year ended December 31, 2015, cement represented approximately 31%, ready-mix concrete approximately 41% and our aggregates and other businesses approximately 28% of net sales in Mexican Peso terms from our operations in the United States before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes and sales prices, net sales from our operations in the United States, in Dollar terms, increased approximately 7% in 2015 compared to 2014.

## Europe

In 2015, our operations in Europe region consisted of our operations in the United Kingdom, Germany, France, and Spain, which represent the most significant operations in this region, in addition to the Rest of Europe. Our net sales from our operations in the Europe region represented approximately 23% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2015, our operations in the Europe region represented approximately 17% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Europe region.

### United Kingdom

Our domestic cement sales volumes from our operations in the United Kingdom increased approximately 7% in 2015 compared to 2014, and ready-mix concrete sales volumes decreased approximately 2% over the same period. The increase in domestic cement sales volumes resulted primarily from improvements in all of our main demand sectors. The decrease in ready-mix concrete sales volumes reflects our focus on profitability. Our operations in the United Kingdom represented approximately 8% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the United Kingdom increased approximately 4%, in Pound terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete increased approximately 5%, in Pound terms, over the same period. For the year ended December 31, 2015, cement represented approximately 17%, ready-mix concrete approximately 28% and our aggregates and other businesses approximately 55% of net sales in Mexican Peso terms from our operations in the United Kingdom before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and sales prices and ready-mix concrete sales prices, partially offset by a decrease in ready-mix concrete sales volumes, net sales from our operations in the United Kingdom, in Pound terms, increased approximately 7% in 2015 compared to 2014.

## Germany

Our domestic cement sales volumes from our operations in Germany decreased approximately 47% in 2015 compared to 2014, and ready-mix concrete sales volumes decreased approximately 45% over the same period. The decreases in our cement and ready-mix concrete sales volumes were primarily due to the sale of assets to Holcim in January 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report. The residential sector remained as the main driver of cement consumption, benefiting from low unemployment, low mortgage rates, rising purchase power and growing immigration. Our cement export volumes from our operations in Germany, which represented approximately 39% of our cement sales volumes in Germany for the year ended December 31, 2015, decreased approximately 24% in 2015 compared to 2014. Our operations in Germany represented approximately 3% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in Germany increased approximately 7%, in Euro terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete increased approximately 2%, in Euro terms, over the same period. For the year ended December 31, 2015, cement represented approximately 29%, ready-mix concrete approximately 35% and our aggregates and other businesses approximately 36% of net sales in Mexican Peso terms from our operations in Germany before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in domestic cement and ready-mix concrete sales volumes, partially offset by the increases in domestic cement and ready-mix concrete sales prices, net sales from our operations in Germany, in Euro terms, decreased approximately 41% in 2015 compared to 2014.

#### France

Our ready-mix concrete sales volumes from our operations in France decreased approximately 5% in 2015 compared to 2014. The decrease in ready-mix concrete sales volumes resulted primarily from lower demand due to continued macroeconomic weakness. Our operations in France represented approximately 5% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of ready-mix concrete of our operations in France decreased approximately 2%, in Euro terms, in 2015 compared to 2014. For the year ended December 31, 2015, ready-mix concrete represented approximately 68% and our aggregates and other businesses approximately 32% of net sales in Mexican Peso terms from our operations in France before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in ready-mix concrete sales volumes and sales prices, net sales from our operations in France, in Euro terms, decreased approximately 6% in 2015 compared to 2014.

## Spain

Our domestic cement sales volumes from our operations in Spain increased approximately 35% in 2015 compared to 2014, while ready-mix concrete sales volumes decreased approximately 18% over the same period. The increase in domestic cement sales volumes resulted primarily from our acquisition of assets from Holcim in January 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report. Our operations in Spain represented approximately 3% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our cement export volumes from our operations in Spain, which represented approximately 61% of our Spain cement sales volumes for the year ended December 31, 2015, increased approximately 19% in 2015 compared to 2014. Of our total cement export volumes from our operations in Spain during 2015, approximately 2% were to Central America and the Caribbean, approximately 7% were to South America, approximately 10% were to the United States, approximately 23% were to Europe and the Middle East and approximately 58% were to Africa. Our average sales price of domestic cement of our operations in Spain increased approximately 1%, in Euro terms, in 2015

compared to 2014, and our average sales price of ready-mix concrete increased approximately 12%, in Euro terms, over the same period. For the year ended December 31, 2015, cement represented approximately 81%, ready-mix concrete approximately 11% and our aggregates and other businesses approximately 8% of net sales from our operations in Spain before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and domestic cement and ready-mix concrete sales prices, partially offset by a decrease in ready-mix concrete sales volumes, net sales from our operations in Spain, in Euro terms, increased approximately 31% in 2015 compared to 2014.

# Rest of Europe

In 2015, our operations in Rest of Europe region consisted of our operations in the Czech Republic, Austria, Poland, Hungary and Latvia, as well as trading activities in Scandinavia and Finland. Our domestic cement sales volumes from our operations in the Rest of Europe increased approximately 28% in 2015 compared to 2014, and ready-mix concrete sales volumes increased approximately 19% over the same period. The increases in domestic cement and ready-mix concrete sales volumes were primarily due to the acquisition of assets from Holcim in January 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report. The infrastructure and residential sectors were the main drivers of demand during the year. Our cement export volumes from our operations in the Rest of Europe segment, which represented approximately 24% of our Rest of Europe cement sales volumes for the year ended December 31, 2015, decreased approximately 17% in 2015 compared to 2014. Our net sales from our operations in the Rest of Europe represented approximately 4% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the Rest of Europe decreased approximately 22%, in Euro terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete decreased approximately 16%, in Euro terms, over the same period. For the year ended December 31, 2015, cement represented approximately 53%, ready-mix concrete approximately 32% and our aggregates and other businesses approximately 15% of net sales in Mexican Peso terms from our operations in the Rest of Europe before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales volumes, partially offset by the decreases in domestic cement and ready-mix concrete sales prices, net sales in the Rest of Europe, in Euro terms, increased approximately 7% in 2015 compared to 2014.

On October 31, 2015, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

## South, Central America and the Caribbean

In 2015, our operations in the SAC region consisted of our operations in Colombia, which represents the most significant operations in this region, in addition to the Rest of SAC. Some of these trading operations in the Caribbean region consist of the resale of cement produced by our operations in Mexico. Our net sales from our operations in the SAC region represented approximately 12% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2015, our operations in the SAC region represented approximately 8% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the SAC region.

### Colombia

Our domestic cement sales volumes from our operations in Colombia decreased approximately 9% in 2015 compared to 2014, and ready-mix concrete sales volumes decreased approximately 3% over the same period. The decreases in domestic cement and ready-mix concrete sales volumes was primarily due to our value-before-volume strategy. Our net sales from our operations in Colombia represented approximately 5% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in Colombia increased approximately 8%, in Colombian Peso terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete increased approximately 6%, in Colombian Peso terms, over the same period. For the year ended December 31, 2015, cement represented approximately 53%, ready-mix concrete approximately 29% and our aggregates and other businesses approximately 18% of our net sales from our operations in Colombia before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement and ready-mix concrete sales prices, completely offset by the decreases in domestic cement and ready-mix concretes sales volumes, net sales of our operations in Colombia, in Colombian Peso terms, remained flat in 2015 compared to 2014.

### Rest of South, Central America and the Caribbean

Our domestic cement volumes from our operations in the Rest of SAC remained flat in 2015 compared to 2014, and ready-mix concrete sales volumes decreased approximately 2% over the same period. Our net sales from our operations in the Rest of SAC represented approximately 8% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our cement export volumes from our operations in the Rest of SAC segment, which represented approximately 15% of our Rest of SAC cement sales volumes for the year ended December 31, 2015, increased approximately 3% in 2015 compared to 2014. Our average sales price of domestic cement from our operations in the Rest of SAC decreased approximately 5% in Dollar terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete decreased approximately 1%, in Dollar terms, over the same period. For the year ended December 31, 2015, cement represented approximately 73%, ready-mix concrete approximately 19% and our other businesses approximately 8% of net sales from our operations in the Rest of SAC before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in ready-mix concrete sales volumes and sales prices and domestic cement sales prices, net sales of our operations in the Rest of SAC, in Dollar terms, decreased approximately 3% in 2015 compared to 2014.

## Asia, Middle East and Africa

In 2015, our operations in the Asia, Middle East and Africa region consisted of our operations in Egypt and Philippines, which represent the most significant operations in this region, in addition to our Rest of Asia, Middle East and Africa segment, which includes the UAE, Israel and Malaysia. Our net sales from our operations in the Asia, Middle East and Africa region represented approximately 7% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. As of December 31, 2015, our operations in the Asia, Middle East and Africa region represented approximately 4% of our total assets. Set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our net sales for our main operations in the Asia, Middle East and Africa region.

### Egypt

Our domestic cement sales volumes from our operations in Egypt decreased approximately 9% in 2015 compared to 2014, while ready-mix concrete sales volumes increased approximately 48% over the same period.

The increase in ready-mix concrete sales volumes resulted primarily from the continuation of government projects and an increase in formal activity. Our net sales from our operations in Egypt represented approximately 3% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms. Our average sales price of domestic cement decreased approximately 5%, in Egyptian Pound terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete increased approximately 12%, in Egyptian Pound terms, over the same period. For the year ended December 31, 2015, cement represented approximately 83%, ready-mix concrete approximately 13% and our aggregates and other businesses approximately 4% of net sales in Mexican Peso terms from our operations in Egypt before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the decreases in domestic cement sales volumes and sales prices, partially offset by the increases in ready-mix concrete sales volumes and sales prices, our net sales in Egypt, in Egyptian Pound terms, decreased approximately 11% in 2015 compared to 2014.

## The Philippines

Our domestic cement sales volumes from our operations in the Philippines increased approximately 21% in 2015 compared to 2014. The increase in our domestic cement sales volumes resulted primarily from growth in the demand of infrastructure sector. In addition, the residential sector remained strong as developers continued to expand housing projects supported by stable inflation, low mortgage rates and higher housing demand from Filipinos. The industrial/commercial sector continued its growth momentum driven by office space demand. Our cement export volumes from our operations in Philippines, which represented approximately 1% of our Philippines cement sales volumes for the year ended December 31, 2015, decreased approximately 11% in 2015 compared to 2014. Our net sales from our operations in the Philippines represented approximately 4% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. Our average sales price of domestic cement from our operations in the Philippines increased approximately 3% in Philippine Peso terms, in 2015 compared to 2014. For the year ended December 31, 2015, cement represented approximately 97%, ready-mix concrete approximately 1%, and our other businesses approximately 2% of our net sales in Mexican Peso terms from our operations in the Philippines before intrasector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increases in domestic cement sales volumes and sales prices, net sales of our operations in the Philippines, in Philippine Peso terms, increased approximately 23% in 2015 compared to 2014.

## Rest of Asia, Middle East and Africa

Our domestic cement sales volumes from our operations in our Rest of Asia, Middle East and Africa segment decreased approximately 14% in 2015 compared to 2014, and ready-mix concrete sales volumes increased approximately 1% over the same period. Our net sales from our operations in our Rest of Asia, Middle East and Africa segment represented approximately 5% of our total net sales for the year ended December 31, 2015, in Mexican Peso terms, before eliminations resulting from consolidation. The cement export volumes from our operations in our Rest of Asia, Middle East and Africa segment, which represented approximately 37% of our Rest of Asia, Middle East and Africa cement sales volumes for the year ended December 31, 2015, increased approximately 78% in 2015 compared to 2014. Our average sales price of domestic cement from our operations in our Rest of Asia, Middle East and Africa segment decreased approximately 1%, in Dollar terms, in 2015 compared to 2014, and our average sales price of ready-mix concrete decreased approximately 1%, in Dollar terms, over the same period. For the year ended December 31, 2015, cement represented approximately 1%, ready-mix concrete approximately 69% and our aggregates and other businesses approximately 24% of our net sales from our operations in our Rest of Asia, Middle East and Africa segment before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable.

As a result of the increase in ready-mix concrete sales volumes, partially offset by the decreases in ready-mix concrete sales prices and domestic cement sales volumes and prices, net sales in our Rest of Asia, Middle East and Africa segment, in Dollar terms, decreased approximately 5% in 2015 compared to 2014.

#### Others

Our Others segment refers to: (i) cement trade maritime operations, (ii) our information technology solutions business (Neoris N.V.), (iii) CEMEX, S.A.B. de C.V. and other corporate entities and (iv) other minor subsidiaries with different lines of business. Net sales from our Others segment increased approximately 20% before intra-sector eliminations within the segment and before eliminations resulting from consolidation, as applicable, in 2015 compared to 2014, in Dollar terms. The increase resulted primarily from an increase in our worldwide cement volume of our trading operations. For the year ended December 31, 2015, our information technology solutions company represented approximately 35% and our trading operations represented approximately 30% of our net sales in our Others segment, in Dollar terms.

Cost of Sales. Our cost of sales, including depreciation, increased approximately 8% from Ps134,742 million in 2014 to Ps146,068 million in 2015. As a percentage of net sales, cost of sales decreased from 67.4% in 2014 to 66.3% in 2015. The decrease in cost of sales as a percentage of net sales was mainly driven by improved operating efficiencies. Our cost of sales includes freight expenses of raw materials used in our producing plants.

Gross Profit. For the reasons explained above, our gross profit increased approximately 14% from approximately Ps65,200 million in 2014 to approximately Ps74,258 million in 2015. As a percentage of net sales, gross profit increased from approximately 32.6% in 2014 to 33.7% in 2015. In addition, our gross profit may not be directly comparable to those of other entities that include all their freight expenses in cost of sales. As described above, we include freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers' locations within distribution expenses, which in aggregate represented costs of approximately Ps20,689 million in 2014 and approximately Ps23,109 million in 2015. As a percentage of net sales, distribution expenses represented 10.3% and 10.5% for the years ended December 31, 2014 and 2015, respectively.

Operating expenses. Our operating expenses increased approximately 10.2%, from approximately Ps43,347 million in 2014 to approximately Ps47,769 million in 2015. As a percentage of net sales, operating expenses represented 21.7% for the years ended December 31, 2014 and 2015. Our operating expenses include expenses related to personnel, equipment and services involved in sales activities and storage of product at points of sale, which are included as part of the administrative and selling expenses, as well as freight expenses of finished products between plants and points of sale and freight expenses between points of sale and the customers' facilities, which are included as part of the distribution expenses line item. For the years ended December 31, 2014 and 2015, selling expenses included as part of the selling and administrative expenses line item amounted to approximately Ps5,674 million and Ps5,943 million, respectively. As a percentage of net sales, administrative and selling expenses represented 11.3% and 11.2% for the years ended December 31, 2014 and 2015, respectively. As mentioned before, we include freight expenses of finished products from our producing plants to our points of sale and from our points of sale to our customers' locations within distribution expenses, which in aggregate represented costs of approximately Ps20,689 million in 2014 and approximately Ps23,109 million in 2015. As a percentage of net sales, distribution expenses represented 10.3% and 10.5% for the years ended December 31, 2014 and 2015, respectively.

## Operating Earnings Before Other Expenses, Net

For the reasons mentioned above, our operating earnings before other expenses, net increased approximately 21.2% from approximately Ps21,853 million in 2014 to approximately Ps26,489 million in 2015. As a percentage of net sales, operating earnings before other expenses, net increased from approximately 10.9% in 2014 to 12%

in 2015. Additionally, set forth below is a quantitative and qualitative analysis of the effects of the various factors affecting our operating earnings before other expenses, net on a geographic segment basis.

## Mexico

Our operating earnings before other expenses, net, from our operations in Mexico increased approximately 17%, in Mexican Peso terms, from operating earnings before other expenses, net, of approximately Ps11,060 million in 2014 to operating earnings before other expenses, net, of approximately Ps12,963 million in 2015. The increase resulted primarily from improved operating efficiencies, partially offset by a decrease in our net sales.

### **United States**

Our operating earnings before other expenses, net, from our operations in the United States increased significantly in Dollar terms. The increase in operating earnings before other expenses, net resulted primarily from an increase in net sales and improved operating efficiencies.

# Europe

*United Kingdom*. Our operating earnings before other expenses, net, from our operations in the United Kingdom increased approximately 127% in Pound terms. The increase resulted primarily from an increase in net sales and improved operating efficiencies.

*Germany*. Our operating earnings before other expenses, net, from our operations in Germany decreased approximately 50% in Euro terms. The decrease resulted primarily from a decrease in net sales, which was primarily due to the sale of assets to Holcim in January 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

*France*. Our operating earnings before other expenses, net, from our operations in France decreased approximately 31% in Euro terms. The decrease resulted primarily from a decrease in our net sales.

*Spain.* Our operating earnings before other expenses, net, from our operations in Spain increased approximately 302% in Euro terms. The increase in the operating earnings before other expenses, net, resulted primarily from an increase in net sales.

*Rest of Europe.* Our operating earnings before other expenses, net, from our operations in the Rest of Europe decreased approximately 13% in Euro terms. The decrease resulted primarily from higher depreciation expense related to the assets acquired from Holcim (a non-cash expense) partially offset by an increase in domestic cement and ready-mix concrete sales volumes, supported by the infrastructure and residential sectors.

On October 31, 2015, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

## South, Central America and the Caribbean

*Colombia*. Our operating earnings before other expenses, net, from our operations in Colombia decreased approximately 6% in Colombian Peso terms. The decrease resulted primarily from lower sales volumes.

Rest of South, Central America and the Caribbean. Our operating earnings before other expenses, net, from our operations in the Rest of SAC increased approximately 13% in Dollar terms. The increase resulted primarily from improved operating efficiencies.

## Asia, Middle East and Africa

*Egypt.* Our operating earnings before other expenses, net, from our operations in Egypt decreased 48% in Egyptian Pound terms. The decrease resulted primarily from a decrease in net sales.

The Philippines. Our operating earnings before other expenses, net, from our operations in the Philippines increased approximately 46% in Philippine Peso terms. The increase resulted primarily from an increase in net sales as well as improved operating efficiencies.

Rest of Asia, Middle East and Africa. Our operating earnings before other expenses, net, from our operations in our Rest of Asia, Middle East and Africa segment decreased approximately 3% in Dollar terms. The decrease resulted primarily from decreases in net sales prices and sales volumes.

Others. Our operating loss before other expenses, net, from our operations in our Others segment increased approximately 19% in Dollar terms. The increase in our operating loss resulted primarily from an increase in net sales.

Other Expenses, Net. Our other expenses, net, decreased approximately 40%, in Mexican Peso terms, from Ps5,451 million in 2014 to Ps3,043 million in 2015. The decrease resulted primarily from lower impairment losses in 2015 compared to 2014. As a percentage of net sales, Other expenses, net, decreased from approximately 2.5% in 2014 to 1.4% in 2015. In 2014, the Other expenses, net, includes impairment losses on inventory of Ps292 million, as well as aggregate impairment losses from assets reclassified to other assets held for sale of Ps2,392 million. See notes 6, 12, 13B, 14 and 15A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

The most significant items included under this caption for the years ended December 31, 2014 and 2015 are as follows:

	For the Year Ended December 31,		
	2014	2015	
	(in millions of I	Mexican Pesos)	
Impairment losses and effects from assets held for sale	Ps(3,848)	Ps(1,526)	
Restructuring costs	(544)	(845)	
Charitable contributions	(18)	(60)	
Results from the sale of assets and others, net	(635)	(612)	
	Ps(5,045)	Ps(3,043)	

### **Financial Items**

Pursuant to IFRS, financial items include:

- financial or interest expense on borrowed funds;
- financial income on cash and cash equivalents;
- changes in the fair value resulting from the valuation of financial instruments, including derivative instruments and marketable securities;
- foreign exchange gains or losses associated with monetary assets and liabilities denominated in foreign currencies; and

accretion result from assets and liabilities and others.

	For the Year Ended December 31,		
	2014	2015	
	(in millions of I	Mexican Pesos)	
Financial items:			
Financial expense	Ps(21,483)	Ps(19,767)	
Other financial income, net:			
Financial income	312	315	
Results from financial instruments	(880)	(2,729)	
Foreign exchange results	3,936	2,083	
Effects of net present value on assets and liabilities and others, net	(837)	(904)	
	Ps(18,952)	Ps(21,002)	

Our financial items in 2015, which comprises financial expense and other financial income, net, as reported in our statements of operations, increased 10.8% from a loss of Ps18,952 million in 2014 to a loss of Ps21,002 million in 2015. The components of the change are shown above.

Our financial expense decreased approximately 8%, from Ps21,483 million in 2014 to Ps19,767 million in 2015, primarily attributable to lower premium payments, as well as lower interest rates on our financial debt during 2015 compared to 2014. See notes 16A and 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our other financial income, net increased approximately 1%, from Ps312 million in 2014 to Ps315 million in 2015. Our loss in our results from financial instruments increased 210% from a loss of Ps880 million in 2014 to a loss of Ps2,729 million in 2015, primarily attributable to derivatives related to CEMEX, S.A.B. de C.V.'s shares. Our foreign exchange results decreased 47%, from a gain of approximately Ps3,936 million in 2014 to a gain of approximately Ps2,083 million in 2015. The decrease was primarily attributable to the fluctuation of the Mexican Peso against the U.S. Dollar. The accretion expense, which represents the effects on our net assets and liabilities recognized at amortized cost due to the passage of time, increased by approximately 8% from an expense of Ps837 million in 2014 to an expense of Ps904 million in 2015.

Derivative Financial Instruments. For the years ended December 31, 2014 and 2015, our derivative financial instruments that had a potential impact on our other financial income, net consisted of equity forward in third-party shares contracts, interest rate swaps contracts, derivatives related to energy projects, conversion options embedded in the March 2015 Optional Convertible Subordinated U.S. Dollar Notes, the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and the March 2018 Optional Convertible Subordinated U.S. Dollar Notes until December 31, 2012 and since then, the conversion option embedded in the November 2019 Mandatory Convertible Mexican Peso Notes, as discussed in note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report. Additionally, on March 13, 2015, CEMEX, S.A.B. de C.V. issued U.S.\$200 million aggregate principal amount of its First March 2020 Optional Convertible Subordinated U.S. Dollar Notes to the holders of the CCUs in exchange for a cash payment of U.S.\$200 million. The proceeds of the issuance of the First March 2020 Optional Convertible Subordinated U.S. Dollar Notes were used to substantially finance the full payment at maturity of the March 2015 Optional Convertible Subordinated U.S. Dollar Notes that matured without conversion. Additionally, on May 28, 2015, CEMEX, S.A.B. de C.V. issued U.S.\$321 million aggregate principal amount of its Second March 2020 Optional Convertible Subordinated U.S. Dollar Notes (along with an estimated 42 million ADSs) to certain holders of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes in exchange for U.S.\$626 million aggregate principal amount of its March 2016 Optional Convertible Subordinated U.S. Dollar Notes.

For the year ended December 31, 2015, our loss from our financial instruments decreased significantly for the reasons described above. See "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Our Equity Forward Arrangements."

*Income Taxes*. Our income tax effect in the statement of operations, which is primarily comprised of current income taxes plus deferred income taxes, decreased approximately 41% from an expense of Ps3,920 million in 2014 to an expense of Ps2,328 million in 2015.

The decrease in the income tax expense is mainly attributable to current income taxes, which decreased from an expense of Ps4,184 million in 2014 to an income of Ps6,149 million in 2015, considering a one-time benefit of approximately Ps12.3 billion resulting from the reduction of income tax accounts payable accrued in prior years related to the disconnection of the tax consolidation regime in Mexico pursuant to a new income tax reform approved by the Mexican Congress in 2015. See notes 19A and 19D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our deferred income tax decreased from an income of Ps264 million in 2014 to an expense of Ps8,477 million in 2015. Our deferred income tax expense in 2015 resulted primarily from a one-time expense of approximately Ps5.9 billion attributable to the reduction of our deferred income tax assets from tax loss carryforwards, also as a consequence of the changes resulting from the new income tax law reform mentioned above, which allowed us to settle a portion of the income tax accounts payable related to the disconnection of the tax consolidation regime in Mexico, using the aforementioned deferred tax assets. See notes 19B and 19D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

For each of the years ended December 31, 2014 and 2015, our statutory income tax rate in Mexico was 30%. Our effective tax rate in 2014, which is determined as described below, resulted in a negative income tax rate of 211.9%, considering a loss before income tax of approximately Ps1,850 million, and our effective tax rate in 2015 resulted in an income tax rate of 73.2%, considering a gain before income tax of approximately Ps3,182 million. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—Certain tax matters may have an adverse effect on our cash flow, financial condition and net income."

*Net Income from continuing operations.* For the reasons described above, our net income from continuing operations for 2015 increased 115%, from a net loss from continuing operations of Ps5,770 million in 2014 to a net income from continuing operations of Ps854 million in 2015.

Discontinued operations, net of tax. For the years ended December 31, 2014 and 2015, our discontinued operations included in our consolidated statements of operations amounted to Ps90 million and Ps1,279 million, respectively. As a percentage of net sales, discontinued operations, net of tax, represented 0.05% and 0.6% for the years ended as of December 31, 2014 and 2015, respectively. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Consolidated Net Income (Loss). For the reasons described above, our consolidated net income (loss) (before deducting the portion allocable to non-controlling interest) for 2015 increased significantly from a consolidated net loss of Ps5,680 million in 2014 to a consolidated net income of Ps2,133 million in 2015.

Non-controlling Interest Net Income. Changes in non-controlling interest net income in any period reflect changes in the percentage of the stock of our subsidiaries held by non-associated third parties as of the end of each month during the relevant period and the consolidated net loss attributable to those subsidiaries. Non-controlling interest net income decreased, from a gain of Ps1,103 million in 2014 to a gain of Ps932 million in 2015, primarily attributable to a decrease in the net income of the consolidated entities in which others have a non-controlling interest.

Controlling Interest Net Income (Loss). Controlling interest net income represents the difference between our consolidated net income and non-controlling interest net income, which is the portion of our consolidated net loss attributable to those of our subsidiaries in which non-associated third parties hold interests. For the reasons described above, our controlling interest net income increased 118%, from a net loss of approximately Ps6,783 million in 2014 to a controlling interest net income of approximately Ps1,201 million in 2015.

# **Liquidity and Capital Resources**

# **Operating Activities**

We have satisfied our operating liquidity needs primarily through operations of our subsidiaries and expect to continue to do so for both the short and long-term. Although cash flow from our operations has historically met our overall liquidity needs for operations, servicing debt and funding capital expenditures and acquisitions, our subsidiaries are exposed to risks from changes in foreign currency exchange rates, price and currency controls, interest rates, inflation, governmental spending, social instability and other political, economic and/or social developments in the countries in which we operate, any one of which may materially decrease our net income and decrease cash from operations. Consequently, in order to meet our liquidity needs, we also rely on cost-cutting and operating improvements to optimize capacity utilization and maximize profitability, as well as borrowing under credit facilities, proceeds of debt and equity offerings, and proceeds from asset sales. Our consolidated net cash flows provided by operating activities from continuing operations before interest, coupons on Perpetual Debentures and income taxes paid in cash were approximately Ps35,941 million in 2014, Ps43,956 million in 2015 and Ps61,188 million in 2016. See our statement of cash flows included elsewhere in this annual report. CEMEX management is of the opinion that working capital is sufficient for our present requirements.

# Sources and Uses of Cash

Our review of sources and uses of resources below refers to nominal amounts included in our statement of cash flows for 2014, 2015 and 2016.

Our primary sources and uses of cash during the years ended December 31, 2014, 2015 and 2016 were as follows:

	Year E	ber 31,	
	2014	2015	2016
	(in millio	ns of Mexica	nn Pesos)
Operating Activities Consolidated net income (loss) Discontinued operations, net of tax	(5,680) 90	2,133 1,279	15,207 1,024
Net income (loss) from continuing operations	(5,770) 39,740 1,475	854 38,789 3,541	14,183 35,982 11,023
Net cash flows provided by operating activities from continuing operations before interest, coupons on Perpetual Debentures and income taxes Financial expense and coupons on Perpetual Debentures and income taxes paid in cash	35,445 (24,522)	43,184 (25,302)	61,188 (23,312)
Net cash flows provided by operating activities of continuing operations  Net cash flows provided by operating activities of discontinued operations	10,923 1,069	17,882 1,213	37,876 1,194
Net cash flows provided by operating activities	11,992	19,095	39,070
Property, machinery and equipment, net  Disposal of subsidiaries and associates, net  Other long-term assets and others, net	(5,965) 167 (703)	(8,872) 2,722 (1,674)	(4,500) 1,424 (2,326)
Net cash flows used in investing activities of continuing operations	(6,501) (161)	(7,824) (153)	(5,402)
Net cash flows used in investing activities	(6,662)	(7,977)	(5,400)
Sale of non-controlling interest in subsidiaries		_	9,777
Derivative financial instruments	1,561	1,098	399
Issuance (repayment) of debt, net	(6,714)	(11,473)	(37,050)
Other financial obligations, net	(4,396)	177	(9,773)
Securitization of trade receivables	2,052 (1,128)	(506) (1,763)	(999)
Non-current liabilities, net			$\frac{(1,972)}{(20,618)}$
Net cash flows used in financing activities	(8,625)	(12,467)	(39,618)
Decrease in cash and cash equivalents of continuing operations	(4,203)	(2,409)	(7,144)
Increase in cash and cash equivalents of discontinued operations	908	1,060	1,196
Cash conversion effects, net	708 15,176	4,040	2,223 15,280
Cash and cash equivalents at the beginning of the year		12,589	
Cash and cash equivalents at the end of the year	12,589	15,280	11,555

2016. During 2016, excluding the positive foreign currency effect of our initial balances of cash and cash equivalents generated during the period of approximately Ps2,223 million, there was a decrease in cash and cash equivalents of continuing operations of approximately Ps7,144 million. This decrease was the result of our net cash flows used in financing activities of approximately Ps39,618 million and our net cash flows used in investing activities of continuing operations of approximately Ps5,402 million, partially offset by our net cash flows provided by operating activities of continuing operations, which, after financial expense and coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps23,312 million, amounted to approximately Ps37,876 million.

For the year ended December 31, 2016, our net cash flows provided by operating activities included cash flows generated in working capital of approximately Ps11,023 million, which was primarily comprised of trade payables and other accounts payable and accrued expenses, for an aggregate amount of approximately Ps16,826 million, partially offset by trade receivable, net, other accounts receivable and other assets and inventories for an aggregate amount of approximately Ps5,803 million.

During 2016, our net cash flows provided by operating activities of continuing operations after financial expense and coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps37,876 million were mainly disbursed in connection with (i) our net cash flows used in financing activities of approximately Ps39,618 million, which include repayment of our debt, net, other financial obligations, net, securitization of trade receivables and non-current liabilities for an aggregate amount of approximately Ps49,794 million, partially offset by derivative financial instruments and sale of non-controlling interest in subsidiaries for an aggregate amount of approximately Ps10,176 million and (ii) our net cash flows used in the investing activities of continuing operations of approximately Ps5,402 million, which include investing in property, machinery and equipment, net and other long term assets and others, net for an aggregate amount of approximately Ps6,826 million, partially offset by disposal of subsidiaries and associates, net for an amount of approximately Ps1,424 million.

2015. During 2015, excluding the positive foreign currency effect of our initial balances of cash and cash equivalents generated during the period of approximately Ps4,040 million, there was a decrease in cash and cash equivalents of continuing operations of approximately Ps2,409 million. This decrease was the result of our net cash flows used in financing activities of approximately Ps12,467 million and our net cash flows used in investing activities of continuing operations of approximately Ps7,824 million, partially offset by our net cash flows provided by operating activities of continuing operations, which, after financial expense and coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps25,302 million, amounted to approximately Ps17,882 million.

For the year ended December 31, 2015, our net cash flows provided by operating activities included cash flows generated in working capital of approximately Ps3,541 million, which was primarily comprised of cash flows originated by trade payables and other accounts payable and accrued expenses, for an aggregate amount of approximately Ps10,185 million, partially offset by cash flows disbursed by trade receivable, net, other accounts receivable and other assets and inventories for an aggregate amount of approximately Ps6,644 million.

During 2015, our net cash flows provided by operating activities of continuing operations after financial expense and coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps17,882 million were mainly disbursed in connection with (i) our net cash flows used in financing activities of approximately Ps12,467 million, which include repayment of our debt, net, securitization of trade receivables and non-current liabilities for an aggregate amount of approximately Ps13,742 million, partially offset by derivative financial instruments and other financial obligations, net, for an aggregate amount of approximately Ps1,275 million and (ii) our net cash flows used in the investing activities of continuing operations of approximately Ps7,824 million, which include investing in property, machinery and equipment, net, intangible assets and other deferred charges, and other long term assets and others, net for an aggregate amount of approximately Ps10,546 million, partially offset by disposal of subsidiaries and associates, net for an amount of approximately Ps2,722 million.

2014. During 2014, excluding the positive foreign currency effect of our initial balances of cash and cash equivalents generated during the period of approximately Ps708 million, there was a decrease in cash and cash equivalents of continuing operations of approximately Ps3,706 million. This decrease was the result of our net cash flows used in financing activities of approximately Ps8,625 million and our net cash flows used in investing activities of continuing operations of approximately Ps6,500 million, partially offset by our net cash flows provided by operating activities of continuing operations, which, after financial expense, coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps24,522 million, amounted to approximately Ps11,419 million.

For the year ended December 31, 2014, our net cash flows provided by operating activities included cash flows generated in working capital of approximately Ps1,475 million, which was primarily comprised of cash flows originated by other accounts receivable and other assets, trade payables and other accounts payable and accrued expenses, for an aggregate amount of approximately Ps7,539 million, partially offset by cash flows disbursed by trade receivable, net, and inventories for an aggregate amount of approximately Ps6,064 million.

During 2014, our net cash flows provided by operating activities of continuing operations after financial expense, coupons on Perpetual Debentures and income taxes paid in cash of approximately Ps11,419 million were disbursed mainly in connection with (i) our net cash flows used in financing activities of approximately Ps8,625 million, which include repayment of our debt, net, other financial obligations, net, and non-current liabilities for an aggregate amount of approximately Ps12,238 million, partially offset by our cash flows generated by the securitization of trade receivables and our derivative financial instruments for an aggregate amount of approximately Ps3,613 million and (ii) our net cash flows used in investing activities of continuing operations of Ps6,500 million, which include investing in property, machinery and equipment, net, intangible assets and other deferred charges, and other long term assets and others, net, for an aggregate amount of approximately Ps6,667 million, partially offset by our disposal of subsidiaries and associates, net, for an amount of Ps167 million.

As of December 31, 2016, we had the following uncommitted lines of credit, at annual interest rates ranging between approximately 1.25% and 6.50%, depending on the negotiated currency:

	Lines of Credit	Available
	(in millions of Mo	exican Pesos)
Other lines of credit in foreign subsidiaries	9,601	7,230
Other lines of credit from banks	5,834	5,834
	15 435	13 064

# Capital Expenditures

Our capital expenditures incurred for the years ended December 31, 2015 and 2016, and our expected capital expenditures during 2017, which include an allocation to 2017 of a portion of our total future committed amount, are as follows:

	Actual For the Year Ended December 31, Actual		Estimated
	2015	2016	in 2017
	(in mi	llions of U.S.	Dollars)
Mexico	68	84	123
United States	216	197	192
Europe			
United Kingdom	57	30	39
Germany	22	26	13
France	32	19	20
Spain	17	25	13
Rest of Europe	35	23	45
South, Central America and the Caribbean			
Colombia	156	180	96
Rest of South, Central America and the Caribbean	64	34	73
Asia, Middle East and Africa			
Philippines	21	30	41
Egypt	47	20	23
Rest of Asia, Middle East and Africa	18	21	21
Others	1	5	27
Continuing operations	754	685	727
Discontinued operations	10	_	3
Total consolidated	764	<u>685</u>	730
Of which			
Expansion capital expenditures	252	251	212
Base capital expenditures	512	434	518

For the years ended December 31, 2015 and 2016, we recognized U.S.\$754 million and U.S.\$685 million in capital expenditures from our continuing operations, respectively. As of December 31, 2016, in connection with our significant projects, we had contractually committed capital expenditures of approximately U.S.\$111 million, including our capital expenditures estimated to be incurred during 2017. This amount is expected to be incurred during 2017, based on the evolution of the related projects. Pursuant to the Credit Agreement, we are prohibited from making aggregate annual capital expenditures in excess of U.S.\$1 billion (excluding certain capital expenditures, joint venture investments and acquisitions by each of CEMEX Latam and CHP and their respective subsidiaries), which capital expenditures, joint venture investments and acquisitions at any time then incurred are subject to a separate aggregate limit of U.S.\$500 million (or its equivalent) for each of CEMEX Latam and its subsidiaries and CHP and its subsidiaries, in each case, the amounts of which allowed for permitted acquisitions and investments in joint ventures cannot exceed U.S.\$400 million per year.

## Our Indebtedness

As of December 31, 2016, we had approximately Ps273,862 million (U.S.\$13,217 million) (principal amount Ps276,716 million (U.S.\$13,355 million), excluding deferred issuance costs) of total debt plus other financial obligations in our balance sheet, which does not include approximately Ps9,075 million (U.S.\$438 million) of Perpetual Debentures. See notes 16A, 16B and 20D to our 2016 audited consolidated financial

statements included elsewhere in this annual report. Of our total debt plus other financial obligations, approximately 5% were short-term (including current maturities of long-term debt) and 95% were long-term. As of December 31, 2016, approximately 77% of our total debt plus other financial obligations was Dollar-denominated, approximately 21% was Euro-denominated, approximately 1% was Mexican Peso-denominated and immaterial amounts were denominated in other currencies.

On August 14, 2009, CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into the 2009 Financing Agreement, which extended the final maturities of approximately U.S.\$15 billion in syndicated and bilateral loans and private placement notes to February 14, 2014. On July 5, 2012, CEMEX, S.A.B. de C.V. and certain of its subsidiaries launched the 2012 Exchange Offer and Consent Request to eligible creditors under the 2009 Financing Agreement pursuant to which eligible creditors were requested to provide the 2012 Amendment Consents. In addition, CEMEX, S.A.B. de C.V. and certain of its subsidiaries offered to exchange the indebtedness owed to the Participating Creditors for (i) new loans (or, in the case of the private placement notes, new private placement notes) or (ii) up to U.S.\$500 million of our June 2018 U.S. Dollar Notes, in each case, in transactions exempt from registration under the Securities Act.

On September 17, 2012, CEMEX, S.A.B. de C.V. and certain of its subsidiaries successfully completed the 2012 Refinancing Transaction, and CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into (a) the 2012 Amendment and Restatement Agreement, pursuant to which the 2012 Amendment Consents with respect to the 2009 Financing Agreement were given effect, and (b) the 2012 Facilities Agreement, pursuant to which CEMEX, S.A.B. de C.V. and certain of its subsidiaries were deemed to borrow loans from those Participating Creditors participating in the 2012 Exchange Offer and Consent Request in principal amounts equal to the principal amounts of indebtedness subject to the 2009 Financing Agreement that was extinguished by such Participating Creditors. As a result of the 2012 Refinancing Transaction, Participating Creditors received (i) approximately U.S.\$6,155 million in aggregate principal amount of new loans and new private placement notes and (ii) U.S.\$500 million aggregate principal amount of the June 2018 U.S. Dollar Notes. In addition, approximately U.S.\$525 million aggregate principal amount of loans and private placement notes, which had remained outstanding under the 2009 Financing Agreement as of September 17, 2012, were subsequently repaid in full, as a result of prepayments made in accordance with the 2012 Facilities Agreement.

On September 29, 2014, CEMEX, S.A.B. de C.V. and certain of its subsidiaries entered into the Credit Agreement for U.S.\$1.35 billion with nine of the main lending banks from its 2012 Facilities Agreement. On November 3, 2014, five additional banks joined the Credit Agreement as lenders with aggregate commitments of U.S.\$515 million, increasing the total amount of the Credit Agreement from U.S.\$1.35 billion to U.S.\$1.87 billion (increasing the revolving tranche of the Credit Agreement proportionally to U.S.\$746 million).

On July 30, 2015, CEMEX, S.A.B. de C.V. repaid in full the total amount outstanding of approximately U.S.\$1.94 billion under the 2012 Facilities Agreement with new funds from 17 financial institutions, which joined new tranches under the Credit Agreement.

In February 2016, CEMEX, S.A.B. de C.V. and certain of its subsidiaries launched a consent request to lenders under the Credit Agreement, pursuant to which lenders were requested to consent to the 2016 Credit Agreement Amendments. On March 7, 2016, CEMEX, S.A.B. de C.V. and certain of its subsidiaries obtained the requisite consents from lenders under the Credit Agreement to make the 2016 Credit Agreement Amendments. The 2016 Credit Agreement Amendments became effective when certain customary conditions precedent were fulfilled on March 17, 2016.

In addition, the 2016 Credit Agreement Amendments effected changes to the margin grid in the Credit Agreement such that if the consolidated leverage ratio (as defined in the Credit Agreement) is greater than 5.50 times in the reference periods ending on December 31, 2016, March 31, 2017, June 30, 2017, and September 30, 2017, the applicable margin will be 425 bps instead of 400 bps. All other levels in the margin grid remained unchanged.

Finally, pursuant to the 2016 Credit Agreement Amendments (i) the consolidated leverage ratio covenant (as defined in the Credit Agreement) remained at 6.0 times until and including March 31, 2017, and will gradually decline to 4.0 times by June 30, 2020; and (ii) the consolidated coverage ratio covenant (as defined in the Credit Agreement) remained at 1.85 times until and including March 31, 2017, increasing then to 2.0 times on June 30, 2017, and to 2.25 times on December 31, 2017, and remaining at this level for each subsequent reference period.

On July 12, 2016, IFC joined the Credit Agreement as a lender granting CEMEX a loan of €106 million to support CEMEX's sustainable investment programs in emerging markets. The funds will support CEMEX projects designed to enhance environmental performance with 60% of the funds allocated for projects relating to the reduction of CEMEX's greenhouse gas emissions.

On November 30, 2016, CEMEX, S.A.B. de C.V. prepaid U.S.\$373 million outstanding under the Credit Agreement and corresponding to the September 2017 amortization thereunder. With this prepayment, and as part of an agreement reached with a group of existing lenders under the Credit Agreement, U.S.\$664 million (Ps13,758 million) of funded commitments maturing in 2018 were exchanged into a revolving facility, maintaining their original amortization schedule and the same terms and conditions. As of December 31, 2016, total commitments under the Credit Agreement included (i) approximately €746 million (approximately U.S.\$785 million or approximately Ps16,259 million) and (ii) approximately U.S.\$2,826 million (Ps58,555 million), out of which about U.S.\$1,413 million (Ps29,277 million) were in the revolving credit facility. The Credit Agreement currently has an amortization profile, considering all commitments, of approximately U.S.\$783 million in 2018, U.S.\$883 million in 2019 and U.S.\$1,096 million in 2020. See note 16A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

CEMEX, S.A.B. de C.V. and certain of its subsidiaries have pledged under pledge agreements or transferred to a trustee under a security trust substantially all the Collateral, and all proceeds of the Collateral, to secure our payment obligations under the Credit Agreement, the Senior Secured Notes and under several other financing arrangements. These subsidiaries whose shares were pledged or transferred as part of the Collateral collectively own, directly or indirectly, substantially all our operations worldwide. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—We pledged the capital stock of subsidiaries that represent substantially all of our business as collateral to secure our payment obligations under the Credit Agreement, the Senior Secured Notes and other financing arrangements."

As of December 31, 2016, we reported an aggregate principal amount of outstanding debt of approximately Ps56,879 million (U.S.\$2,745 million) (principal amount Ps57,220 million (U.S.\$2,762 million), excluding deferred issuance costs) under the Credit Agreement. As of December 31, 2016, we had U.S.\$849 million available under the U.S.\$1,413 million revolving credit facility. If we are unable to comply with our upcoming principal maturities under our indebtedness, or refinance or extend maturities of our indebtedness, our debt could be accelerated. Acceleration of our debt would have a material adverse effect on our financial condition. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—We have a substantial amount of debt and other financial obligations maturing in the next several years. If we are unable to secure refinancing on favorable terms or at all, we may not be able to comply with our upcoming payment obligations. Our ability to comply with our principal maturities and financial covenants may depend on us making asset sales, and there is no assurance that we will be able to execute such sales on terms favorable to us or at all."

For a discussion of restrictions and covenants under the Credit Agreement, see "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—The Credit Agreement contains several restrictions and covenants. Our failure to comply with such restrictions and covenants could have a material adverse effect on our business and financial conditions."

For a description of the Senior Secured Notes, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Senior Secured Notes."

Some of our subsidiaries and special purpose vehicles have issued or provided guarantees of certain of our indebtedness, as indicated in the table below.

	Senior Secured Notes	Credit Agreement	Perpetual Debentures	CBs(1)
Amount outstanding as of March 31, 2017	U.S.\$7,924 million (Ps148,417 million) (principal amount U.S.\$7,992 million (Ps149,690 million))	U.S.\$2,192 million (Ps41,056 million) (principal amount U.S.\$2,208 million (Ps41,356 million))	U.S.\$439 million (Ps8,222 million)	U.S.\$36 million (Ps674 million)
CEMEX, S.A.B. de C.V.	✓	✓	✓	1
CEMEX México, S.A. de C.V	✓	✓	✓	1
CEMEX Concretos, S.A. de C.V	✓	✓	✓	✓
Empresas Tolteca de México, S.A. de C.V	✓	✓		
New Sunward Holding B.V	✓	✓		
CEMEX España, S.A	✓	✓	✓	
Cemex Asia B.V	✓	✓		
CEMEX Corp	✓	✓		
CEMEX Finance LLC	✓	✓		
Cemex Egyptian Investments B.V	✓	✓		
CEMEX France Gestion (S.A.S)	✓	✓		
Cemex Research Group AG	✓	✓		
CEMEX UK	✓	✓		

<sup>(1)</sup> Includes long-term secured CBs.

In addition, as of March 31, 2017, (i) CEMEX Materials LLC is a borrower of Ps2,941 million (U.S.\$157 million) (principal amount Ps2,810 million (U.S.\$150 million)) under an indenture, which is guaranteed by CEMEX Corp.; and (ii) several of our other operating subsidiaries were borrowers under debt facilities and other financial obligations aggregating Ps12,905 million (U.S.\$689 million).

Most of our outstanding indebtedness has been incurred to finance our acquisitions and to finance our capital expenditure programs. Historically, we have addressed our liquidity needs (including funds required to make scheduled principal and interest payments, refinance debt, and fund working capital and planned capital expenditures) with operating cash flow, securitizations, borrowings under credit facilities, proceeds of debt and equity offerings and proceeds from asset sales.

The moderate growth of the global economic environment and its adverse effects on our operating results may negatively affect our credit rating and the market value of CEMEX, S.A.B. de C.V. common stock, CPOs and ADSs. If current economic pressures continue or worsen, we may be dependent on the issuance of equity as a source to repay our existing indebtedness, including indebtedness under the Credit Agreement. Although we have been able to raise debt, equity and equity-linked capital in the recent past, previous conditions in the capital markets in 2008 and 2009 were such that traditional sources of capital were not available to us on reasonable terms or at all. As a result, we cannot assure you that we will be able to successfully raise additional debt or equity capital on terms that are favorable to us or at all.

If the global economic environment deteriorates and our operating results worsen significantly, if we were unable to complete debt or equity offerings or if the proceeds of any divestitures and/or our cash flow or capital resources prove inadequate, we could face liquidity problems and may not be able to comply with our upcoming principal payments under our indebtedness or refinance our indebtedness. If we are unable to comply with our upcoming principal maturities under our indebtedness, or refinance or extend maturities of our indebtedness, our debt could be accelerated. Acceleration of our debt would have a material adverse effect on our business and financial condition.

We and our subsidiaries have sought and obtained waivers and amendments to several of our debt instruments relating to a number of financial ratios in the past. Our ability to comply with these ratios may be affected by current global economic conditions and volatility in foreign exchange rates and the financial and capital markets. We may need to seek waivers or amendments in the future. However, we cannot assure you that any future waivers or amendments, if requested, will be obtained. If we or our subsidiaries are unable to comply with the provisions of our debt instruments, and are unable to obtain a waiver or amendment, the indebtedness outstanding under such debt instruments could be accelerated. Acceleration of these debt instruments would have a material adverse effect on our financial condition.

## Relevant Transactions Related to Our Indebtedness During 2016

As of December 31, 2016, we had approximately Ps273,862 million (U.S.\$13,217 million) (principal amount Ps276,716 million (U.S.\$13,355 million), excluding deferred issuance costs) of total debt plus other financial obligations in our balance sheet, which does not include approximately Ps9,075 million (U.S.\$438 million) of Perpetual Debentures. As of December 31, 2016, approximately 77% of our total debt plus other financial obligations was Dollar-denominated, approximately 21% was Euro-denominated, approximately 1% was Mexican Peso-denominated and immaterial amounts were denominated in other currencies. Our financing activities through December 31, 2015 are described in the 2015 Annual Report. The following is a description of our most important transactions related to our indebtedness in 2016:

- On March 7, 2016, CEMEX, S.A.B. de C.V. and certain of its subsidiaries obtained the requisite
  consents from lenders under the Credit Agreement to make the 2016 Credit Agreement Amendments.
  The 2016 Credit Agreement Amendments became effective when certain customary conditions
  precedent were fulfilled on March 17, 2016.
- On March 15, 2016, CEMEX, S.A.B. de C.V. repaid the remaining outstanding amount (U.S.\$352 million) of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes at their maturity.
- On March 16, 2016, CEMEX, S.A.B. de C.V. issued U.S.\$1.0 billion aggregate principal amount of its April 2026 U.S. Dollar Notes. A portion of the net proceeds from the offering of the April 2026 U.S. Dollar Notes of approximately U.S.\$830 million were used to fund the April 2019 U.S. Dollar and Euro Notes Redemption, and the remaining net proceeds from the issuance of the April 2026 U.S. Dollar Notes were used to fund the June 2018 U.S. Dollar Notes Redemption.
- On April 1, 2016, CEMEX España, acting through its Luxembourg branch, issued an irrevocable notice of redemption with respect to the April 2019 U.S. Dollar and Euro Notes, pursuant to which it redeemed the remaining U.S.\$603.7 million aggregate principal amount of the April 2019 U.S. Dollar Notes, including some notes held by CEMEX, S.A.B. de C.V., and the remaining €179.2 million aggregate principal amount of the April 2019 Euro Notes on May 3, 2016 using a portion of the proceeds from the issuance by CEMEX, S.A.B. de C.V. of the April 2026 U.S. Dollar Notes on March 16, 2016.
- On April 28, 2016, CEMEX, S.A.B. de C.V. canceled U.S.\$217.3 million aggregate principal amount of Perpetual Debentures. On May 13, 2016, CEMEX, S.A.B. de C.V. canceled U.S.\$7.8 million and €6.1 million aggregate principal amount of Perpetual Debentures. These cancelations refer to Perpetual Debentures that were already held by us.

- On May 2, 2016, CEMEX, S.A.B. de C.V. completed the April 2019 U.S. Dollar and Euro Notes Redemption.
- On May 12, 2016, CEMEX, S.A.B. de C.V. completed the May 2016 Tender Offer. The May 2016 Tender Offer was financed with the proceeds from a draw-down on the revolving tranche of our Credit Agreement of U.S.\$400 million. All October 2018 U.S. Dollar Notes and December 2019 U.S. Dollar Notes purchased in the May 2016 Tender Offer were immediately canceled. Following the settlement of the May 2016 Tender Offer, U.S.\$319.5 million aggregate principal amount of the October 2018 U.S. Dollar Notes and U.S.\$746.2 million aggregate principal amount of the December 2019 U.S. Dollar Notes remained outstanding.
- On June 14, 2016, CEMEX Finance LLC issued €400 million aggregate principal amount of its June 2024 Euro Notes. The net proceeds from the offering of the June 2024 Euro Notes were used for general corporate purposes, including to repay indebtedness, all in accordance with the Credit Agreement.
- On June 15, 2016, CEMEX, S.A.B. de C.V. completed the June 2018 U.S. Dollar Notes Redemption.
- On July 12, 2016, IFC joined the Credit Agreement as a lender granting CEMEX a loan of €106 million to support CEMEX's sustainable investment programs in emerging markets. The funds will support CEMEX projects designed to enhance environmental performance with 60% of the funds allocated for projects relating to the reduction of CEMEX's greenhouse gas emissions.
- On July 28, 2016, CEMEX, S.A.B. de C.V. completed the July 2016 Tender Offer. The July 2016
  Tender Offer was financed with the proceeds from a draw-down on the revolving tranche of our Credit
  Agreement of approximately U.S.\$450 million. All October 2022 U.S. Dollar Notes purchased in the
  July 2016 Tender Offer were immediately canceled. Following the settlement of the July 2016 Tender
  Offer, U.S.\$1,055.6 million aggregate principal amount of the October 2022 U.S. Dollar Notes
  remained outstanding.
- On August 15, 2016, CEMEX, S.A.B. de C.V. completed the redemption of the remaining 5.875% Senior Secured Notes due 2019.
- On October 28, 2016, CEMEX, S.A.B. de C.V. completed the October 2016 Tender Offer. The October 2016 Tender Offer was financed with the proceeds from a draw-down on the revolving tranche of our Credit Agreement of U.S.\$500 million, together with available cash. All January 2021 U.S. Dollar Notes purchased in the October 2016 Tender Offer were immediately canceled. Following the settlement of the October 2016 Tender Offer, U.S.\$758.1 million aggregate principal amount of the January 2021 U.S. Dollar Notes remained outstanding.
- On November 30, 2016, CEMEX, S.A.B. de C.V. prepaid U.S.\$373 million outstanding under the Credit Agreement and corresponding to the September 2017 amortization thereunder. With this prepayment, and as part of an agreement reached with a group of existing lenders under the Credit Agreement, U.S.\$664 million (Ps13,758 million) of funded commitments maturing in 2018 were exchanged into a revolving facility, maintaining their original amortization schedule and the same terms and conditions. As of December 31, 2016, total commitments under the Credit Agreement included (i) approximately €746 million (approximately U.S.\$785 million or approximately Ps16,259 million) and (ii) approximately U.S.\$2,826 million (Ps58,555 million), out of which about U.S.\$1,413 million (Ps29,277 million) were in the revolving credit facility.
- In 2016, the repurchase of U.S.\$198.5 million aggregate principal amount of the following Senior Secured Notes (all of which Senior Secured Notes have been canceled):
  - U.S.\$2.1 million aggregate principal amount of June 2018 U.S. Dollar Notes;
  - U.S.\$46.1 million aggregate principal amount of CEMEX, S.A.B. de C.V.'s 5.875% Senior Secured Notes due 2019;

- U.S.\$61.0 million aggregate principal amount of December 2019 U.S. Dollar Notes;
- U.S.\$22.9 million aggregate principal amount of April 2019 U.S. Dollar Notes;
- U.S.\$28.9 million aggregate principal amount of October 2022 U.S. Dollar Notes;
- U.S.\$6.1 million aggregate principal amount of October 2018 U.S. Dollar Notes; and
- U.S.\$31.4 million aggregate principal amount of January 2021 U.S. Dollar Notes.

We used a substantial portion of the proceeds from these transactions to repay and refinance indebtedness, to improve our liquidity position and for general corporate purposes. Through these and prior refinancing transactions, we addressed all maturities under the 2009 Financing Agreement and the 2012 Facilities Agreement. For a description of the 2016 Credit Agreement Amendments, see "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Our Indebtedness."

# Our Other Financial Obligations

Other financial obligations in the consolidated balance sheet as of December 31, 2015 and 2016 are detailed as follows:

	December 31, 2015			<b>December 31, 2016</b>		
	Short- term	Long- term	Total	Short- term	Long- term	Total
March 2020 Optional Convertible Subordinated						
U.S. Dollar Notes	Ps —	8,569	8,569	_	10,417	10,417
March 2018 Optional Convertible Subordinated						
U.S. Dollar Notes	_	10,826	10,826	_	13,575	13,575
March 2016 Optional Convertible Subordinated						
U.S. Dollar Notes	6,007	_	6,007	_	_	_
November 2019 Mandatory Convertible Mexican Peso						
Notes	239	961	1,200	278	689	967
Liabilities secured with accounts receivable	9,071	1,430	10,501	11,095	_	11,095
Capital leases	270	1,482	1,752	285	1,291	1,576
	Ps15,587	23,286	38,855	11,658	25,972	37,630

As mentioned in note 2F to our 2016 audited consolidated financial statements included elsewhere in this annual report, financial instruments convertible into CEMEX, S.A.B. de C.V.'s CPOs and/or ADSs contain components of both liability and equity, which are recognized differently depending on whether the instrument is mandatorily convertible, or is optionally convertible by election of the note holders, as well as the currency in which the instrument is denominated.

# March 2020 Optional Convertible Subordinated U.S. Dollar Notes

During 2015, CEMEX, S.A.B. de C.V. issued U.S.\$521 million (Ps 8,977 million) aggregate principal amount of its March 2020 Optional Convertible Subordinated U.S. Dollar Notes. The March 2020 Optional Convertible Subordinated U.S. Dollar Notes were issued: (a) U.S.\$200 million as a result of the exercise on March 13, 2015 of U.S.\$200 million notional amount of CCUs (described below), and (b) U.S.\$321 million as a result of private exchanges with certain institutional investors on May 28, 2015, which together with early conversions, resulted in a total of approximately U.S.\$626 million aggregate principal amount of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes held by such investors being paid and the issuance and delivery by CEMEX of an estimated 42 million ADSs, which included a number of additional ADSs issued to the holders as non-cash inducement premiums. The March 2020 Optional Convertible Subordinated U.S. Dollar

Notes, which are subordinated to all of CEMEX's liabilities and commitments, are convertible into a fixed number of CEMEX, S.A.B. de C.V.'s ADSs at any time at the holder's election and are subject to antidilution adjustments. The difference at the exchange date between the fair value of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and the 42 million ADSs against the fair value of March 2020 Optional Convertible Subordinated U.S. Dollar Notes, represented a loss of approximately Ps365 million recognized in 2015 as part of other financial (expense) income, net. As of December 31, 2015 and 2016, the conversion price per ADS was approximately U.S.\$11.90 and U.S.\$11.45, respectively. The aggregate fair value of the conversion option as of the issuance dates which amounted to approximately Ps199 million was recognized in other equity reserves. After antidilution adjustments, the conversion rate as of December 31, 2015 and 2016 was 84.00 ADS and 87.3646 ADS, respectively, per each U.S.\$1 thousand principal amount of such notes. See note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

### March 2018 Optional Convertible Subordinated U.S. Dollar Notes

On March 15, 2011, CEMEX, S.A.B. de C.V. closed the offering of U.S.\$690 million (Ps8,211 million) aggregate principal amount of the March 2018 Optional Convertible Subordinated U.S. Dollar Notes. The notes are subordinated to all of CEMEX's liabilities and commitments. The notes are convertible into a fixed number of CEMEX, S.A.B. de C.V.'s ADSs, at the holder's election, and are subject to antidilution adjustments. As of December 31, 2015 and 2016, the conversion price per ADS was approximately U.S.\$9.27 dollars and U.S.\$8.92 dollars, respectively. After antidilution adjustments, the conversion rate as of December 31, 2015 and 2016 was 107.8211 ADS and 112.1339 ADS, respectively, per each U.S.\$1 thousand principal amount of the March 2018 Optional Convertible Subordinated U.S. Dollar Notes. A portion of the net proceeds from this transaction were used to fund the purchase of capped call options, which are generally expected to reduce the potential dilution cost to us upon the potential conversion of the March 2018 Optional Convertible Subordinated U.S. Dollar Notes. See notes 16B and 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# November 2019 Mandatory Convertible Mexican Peso Notes

In December 2009, CEMEX, S.A.B. de C.V. completed an exchange offer of debt into mandatorily convertible securities in pesos for approximately U.S.\$315 million (Ps4,126 million) of the November 2019 Mandatory Convertible Mexican Peso Notes. Reflecting antidilution adjustments, the notes will be converted at maturity or earlier if the price of the CPO reaches approximately Ps29.50 into approximately 210 million CPOs at a conversion price of approximately Ps18.1808 per CPO. During their tenure, holders have an option to voluntarily convert their securities on any interest payment date into CPOs. Considering the currency in which the notes are denominated and the functional currency of CEMEX, S.A.B. de C.V.'s financing division, the conversion option embedded in these securities is treated as a stand-alone derivative liability at fair value in the statement of operations, recognizing an initial effect of Ps365 million. Changes in fair value of the conversion option generated gains of approximately U.S.\$11 million (Ps159 million) in 2014, gains of approximately U.S.\$18 million (Ps310 million) in 2015 and losses of approximately U.S.\$29 million (Ps601 million) in 2016. See notes 2D and 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# Our Receivables Financing Arrangements

Our subsidiaries in Mexico, the United States, France and the United Kingdom are parties to sales of trade accounts receivable programs with financial institutions, referred to as securitization programs. As of December 31, 2015 and 2016, trade accounts receivable included receivables of U.S.\$746 million (Ps12,858 million) and U.S.\$658 million (Ps13,644 million), respectively. Under these programs, our subsidiaries effectively surrender control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, we retain certain residual interest in the programs and/or maintain

continuing involvement with the accounts receivable; therefore, the amounts received are recognized within "Other financial obligations." Trade accounts receivable qualifying for sale exclude amounts over certain days past due or concentrations over certain limits to any customer, according to the terms of the programs. The portion of the accounts receivable sold maintained as reserves amounted to Ps2,357 million and Ps2,549 million as of December 31, 2015 and 2016, respectively. Therefore, the funded amount to CEMEX was U.S.\$609 million (Ps10,501 million) in 2015 and U.S.\$535 million (Ps11,095 million) in 2016. The discount granted to the acquirers of the trade accounts receivable is recorded as financial expense and amounted to approximately U.S.\$16 million (Ps249 million) and U.S.\$14 million (Ps258 million) in 2015 and 2016, respectively. Our securitization programs are negotiated for specific periods and may be renewed at their maturity. As of December 31, 2016, the securitization programs outstanding in Mexico, the United States, France and the United Kingdom each mature in March 2017. See notes 9 and 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report. For a description of our renewals of the securitization programs, see "Item 5—Operating and Financial Review and Prospects—Recent Developments—Recent Developments Relating to Our Indebtedness."

#### Capital Leases

As of December 31, 2015 and 2016, we held several operating buildings and mainly mobile equipment, under capital lease contracts for a total of approximately U.S.\$102 million (Ps1,752 million) and U.S.\$84 million (Ps1,576 million), respectively. See note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report. Future payments associated with these contracts are presented in note 23E to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# **Our Equity Forward Arrangements**

As of December 31, 2015 and 2016, we had a forward contract to be settled in cash maturing in October 2016 over the price of 59.5 million CPOs of Axtel, S.A.B. de C.V. ("Axtel"), a Mexican telecommunications company traded on the Mexican Stock Exchange. Changes in the fair value of this instrument generated losses of approximately U.S.\$9 million (Ps133 million) in 2014, gains of approximately U.S.\$15 million (Ps258 million) in 2015 and losses of approximately U.S.\$2 million (Ps30 million) in 2016, recognized in our statements of operations for each period. In October 2015, Axtel announced its merger with Alestra, S. de R.L. de C.V. ("Alestra"), a Mexican provider of information technology solutions and a subsidiary of Alfa, S.A.B. de C.V. ("Alfa") whose merger became effective on February 15, 2016. In connection with this merger, on January 6, 2016, we settled in cash the forward contract and received approximately U.S.\$4 million, net of transaction costs. As of December 31, 2015, we held an investment in Axtel that, upon completion of the Alestra and Axtel merger, would be exchanged proportionately according to the new ownership interests for shares in the new merged entity that will remain public and that we believe has an attractive business outlook. Therefore, in a separate transaction after the settlement of the Axtel forward contract, we purchased 59.5 million CPOs of Axtel in the open market and incorporated them into our existing investment in Axtel as part of our investments available for sale. See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

#### Perpetual Debentures

As of December 31, 2015 and 2016, non-controlling interest stockholders' equity included approximately U.S.\$440 million (Ps7,581 million) and U.S.\$438 million (Ps9,075 million), respectively, representing the notional amount of Perpetual Debentures, which exclude any perpetual debentures held by subsidiaries. The Perpetual Debentures have no fixed maturity date and do not represent contractual obligations to exchange any series of its outstanding Perpetual Debentures for financial assets or financial liabilities. Based on their characteristics, the Perpetual Debentures, issued through SPVs, qualify as equity instruments and are classified within non-controlling interest as they were issued by consolidated entities, and, if the conditions to interest deferred are satisfied, we have the unilateral right to defer indefinitely the payment of interest due on the Perpetual Debentures. Issuance costs, as well as the interest expense, which is accrued based on the principal

amount of the Perpetual Debentures, are included within "Other equity reserves" and represented expenses of approximately Ps432 million and Ps507 million in 2015 and 2016, respectively. The different SPVs were established solely for purposes of issuing the Perpetual Debentures and are included in our 2016 audited consolidated financial statements included elsewhere in this annual report. As of December 31, 2016, the Perpetual Debentures were as follows

Issuer	Issuance Date	Nominal Amount at Issuance Date (in millions)		Nominal Amount Outstanding as of December 31, 2016 (in millions)		Repurchase Option	Interest Rate	
C10-EUR Capital (SPV)								
Ltd	May 2007	€	730	€	64	Tenth anniversary	6.277%	
C8 Capital (SPV) Ltd.(1)	February 2007	U.S	.\$750	U.S	.\$135	Eighth anniversary	LIBOR + 4.40%	
C5 Capital (SPV) Ltd.(1)	December 2006	U.S	.\$350	U.S	.\$ 61	Fifth anniversary	LIBOR + 4.277%	
C10 Capital (SPV) Ltd	December 2006	U.S	.\$900	U.S	.\$175	Tenth anniversary	LIBOR + 4.71%	

<sup>(1)</sup> We are restricted to call these Perpetual Debentures under the Credit Agreement.

# Stock Repurchase Program

Under Mexican law, CEMEX, S.A.B. de C.V.'s shareholders may authorize a stock repurchase program at any annual general ordinary shareholders' meeting. Unless otherwise instructed by CEMEX, S.A.B. de C.V.'s shareholders, we are not required to purchase any minimum number of shares pursuant to such program.

In connection with CEMEX, S.A.B. de C.V.'s 2014, 2015 and 2016 annual general ordinary shareholders' meetings held on March 26, 2015, March 31, 2016, and March 30, 2017, respectively, no stock repurchase program has been proposed between March 2014 and the date of this annual report. Subject to certain exceptions, we are not permitted to repurchase shares of our capital stock under the Credit Agreement and the indentures governing the Senior Secured Notes.

# Research and Development, Patents and Licenses, etc.

Headed by CEMEX Research Group AG ("CEMEX Research Group"), based in Switzerland, R&D is increasingly assuming a key role as it is recognized as an important contributor to CEMEX's comprehensive pricing strategy for CEMEX's products. Through the development of innovative technologies, services, and commercial models, CEMEX is leveraging its know-how based assets to create an important differentiation in its offerings to customers in a broad range of markets with unique challenges. Focus is placed on creating tangible value for our customers by making their business more profitable, but more importantly, as leaders in the industry, there is an underlying mission for CEMEX to elevate and accelerate the industry's evolution in order to achieve greater sustainability, increase engagement in social responsibility and provoke an important leap in its technological advancement.

CEMEX's R&D initiatives are globally led, coordinated and managed by CEMEX Research Group, which encompasses the areas of Product Development & Construction Trends, Cement Production Technology, Sustainability, Business Process & IT, Innovation, and Commercial & Logistics. The areas of Product Development & Construction Trends and Cement Production Technology are responsible for, among others, developing new products for our cement, ready-mix concrete, aggregate and admixture businesses as well as introduce novel and/or improved processing and manufacturing technology for all of CEMEX's core businesses. Additionally, the Product Development & Construction Trends and Sustainability areas collaborate to develop and propose construction solutions through consulting and the integration of the aforementioned technologies. The Cement Production Technology and Sustainability areas are dedicated to, among others, operational efficiencies leading to cost reductions and enhancing our CO2 footprint and overall environmental impact through the usage of alternative or biomass fuels and the use of supplementary materials in substitution of

clinker. For example, we have developed processes and products that allow us to reduce heat consumption in our kilns, which in turn reduces energy costs. Global products/brands have been conceptualized and engineered to positively impact the jobsite safety, promote efficient construction practices, sensibly preserve natural resources vital to life, lower carbon foot-print and improve the quality of life in rapidly transforming cities. Underlying CEMEX's R&D philosophy is a growing culture of global collaboration and coordination, where the Innovation Team identifies and promotes novel collaboration practices, and mobilizes its adoption within CEMEX. Getting closer and understanding our customers is a fundamental transformation within CEMEX, and consequently the Commercial & Logistics area is carrying out research initiatives to better attend the needs of customers as well as identify key changes in our supply chain management that will enable us to bring products, solutions, and services to our customers in the most cost-effective and efficient manner.

There are nine laboratories supporting CEMEX's R&D efforts under a collaboration network. The laboratories are strategically located in close proximity to our plants, and assist the operating subsidiaries with troubleshooting, optimization techniques and quality assurance methods. The laboratory located in Switzerland is continually improving and consolidating our research and development efforts in the areas of cement, concrete, aggregates, admixtures, mortar and asphalt technology, sustainability as well as in energy management. In addition, CEMEX Research Group actively generates as well as registers patents and pending applications in many of the countries in which CEMEX operates. Patents and trade secrets are managed strategically in order to ensure an important technology lock-ins associated with CEMEX technology.

Our Information Technology divisions develop information management systems and software relating to cement and ready-mix concrete operational practices, automation and maintenance. These systems have helped us to better serve our clients with respect to purchasing, delivery and payment. More importantly, thanks to the activities of the Business Process and IT departments, CEMEX is continuously improving and innovating its business processes to adapt them to the dynamically evolving markets, and better serve CEMEX's needs.

R&D activities comprise part of the daily routine of the departments and divisions mentioned above; therefore, the costs associated with such activities are expensed as incurred. However, the costs incurred in the development of software for internal use are capitalized and amortized in operating results over the estimated useful life of the software, which is approximately five years.

In 2014, 2015 and 2016, the total combined expense of the technology and energy departments in CEMEX, which includes all significant R&D activities, amounted to approximately Ps538 million (U.S.\$36 million), Ps660 million (U.S.\$41 million) and Ps712 million (U.S.\$38 million), respectively.

### **Trend Information**

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2016 that are reasonably likely to have a material and adverse effect on our net sales, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future results of operations or financial conditions.

# **Summary of Material Contractual Obligations and Commercial Commitments**

# The Credit Agreement

On September 29, 2014, CEMEX, S.A.B. de C.V. entered into the Credit Agreement for U.S.\$1.35 billion with nine of the main lending banks from our 2012 Facilities Agreement. On November 3, 2014, five additional banks joined the Credit Agreement as lenders with aggregate commitments of U.S.\$515 million, increasing the total amount of the Credit Agreement from U.S.\$1.35 billion to U.S.\$1.87 billion (increasing the revolving tranche of the Credit Agreement proportionally to U.S.\$746 million). On July 30, 2015, CEMEX, S.A.B. de C.V.

repaid in full the total amount outstanding of approximately U.S.\$1.94 billion under the 2012 Facilities Agreement with new funds from 17 financial institutions. These lenders have joined new tranches under the Credit Agreement, allowing us to increase the average life of our syndicated bank debt to approximately four years as of such date. The new tranches share the same guarantors and collateral package as the original tranches under the Credit Agreement.

As of December 31, 2016, we reported an aggregate principal amount of outstanding debt under the Credit Agreement of approximately Ps56,879 million (U.S.\$2,745 million) (principal amount Ps57,220 million (U.S.\$2,762 million), excluding deferred issuance costs). The Credit Agreement is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

On July 12, 2016, IFC joined the Credit Agreement as a lender granting CEMEX a loan of €106 million to support CEMEX's sustainable investment programs in emerging markets. The funds will support CEMEX projects designed to enhance environmental performance with 60% of the funds allocated for projects relating to the reduction of CEMEX's greenhouse gas emissions.

On November 30, 2016, CEMEX, S.A.B. de C.V. prepaid U.S.\$373 million outstanding under the Credit Agreement and corresponding to the September 2017 amortization thereunder. With this prepayment, and as part of an agreement reached with a group of existing lenders under the Credit Agreement, U.S.\$664 million (Ps13,758 million) of funded commitments maturing in 2018 were exchanged into a revolving facility, maintaining their original amortization schedule and the same terms and conditions. As of December 31, 2016, total commitments under the Credit Agreement included (i) approximately €746 million (approximately U.S.\$785 million or approximately Ps16,259 million) and (ii) approximately U.S.\$2,826 million (Ps58,555 million), out of which about U.S.\$1,413 million (Ps29,277 million) were in the revolving credit facility. The Credit Agreement currently has an amortization profile, considering all commitments, of approximately U.S.\$783 million in 2018, U.S.\$883 million in 2019 and U.S.\$1,096 million in 2020. See note 16A to our 2016 audited consolidated financial statements included elsewhere in this annual report.

The Credit Agreement is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

For a discussion of restrictions and covenants under the Credit Agreement, see "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—The Credit Agreement contains several restrictions and covenants. Our failure to comply with such restrictions and covenants could have a material adverse effect on our business and financial conditions."

### Senior Secured Notes

The indentures governing the Senior Secured Notes impose significant operating and financial restrictions on us. These restrictions will limit our ability, among other things, to: (i) create liens; (ii) incur in additional debt; (iii) change CEMEX's business or the business of any obligor or material subsidiary (in each case, as defined in the Credit Agreement); (iv) enter into mergers; (v) enter into agreements that restrict our subsidiaries' ability to pay dividends or repay intercompany debt; (vi) acquire assets; (vii) enter into or invest in joint venture agreements; (viii) dispose certain assets; (ix) grant additional guarantees or indemnities; (x) declare or pay cash dividends or make share redemptions; (xi) enter into certain derivatives transactions and (xii) exercise any call option in relation to any perpetual bonds issues unless the exercise of the call options does not have a materially negative impact on our cash flow.

October 2022 U.S. Dollar Notes. On October 12, 2012, our subsidiary, CEMEX Finance LLC, issued the October 2022 U.S. Dollar Notes in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX, S.A.B. de C.V., CEMEX México, CEMEX España, New Sunward, Cemex Asia B.V. ("CEMEX Asia"), CEMEX Concretos, S.A. de C.V. ("CEMEX Concretos"),

CEMEX Corp., Cemex Egyptian Investments B.V. ("CEMEX Egyptian Investments"), CEMEX France, CEMEX Research Group, CEMEX UK and Empresas Tolteca de México, S.A. de C.V. ("Empresas Tolteca") have fully and unconditionally guaranteed the performance of all obligations of CEMEX Finance LLC under the October 2022 U.S. Dollar Notes on a senior basis. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral. On June 29, 2016, CEMEX, S.A.B. de C.V. commenced a tender offer to purchase up to U.S.\$450 million of the outstanding October 2022 U.S. Dollar Notes. On July 28, 2016, CEMEX, S.A.B. de C.V. announced that approximately U.S.\$355.3 million of the October 2022 U.S. Dollar Notes were validly tendered by holders of such notes. All such October 2022 U.S. Dollar Notes purchased in the tender offer were immediately canceled. Following the settlement of the tender offer, U.S.\$1,055.6 million aggregate principal amount of the October 2022 U.S. Dollar Notes remained outstanding.

December 2019 U.S. Dollar Notes. On August 12, 2013, CEMEX, S.A.B. de C.V. issued the December 2019 U.S. Dollar Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Finance LLC, CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the December 2019 U.S. Dollar Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral. On May 12, 2016, CEMEX, S.A.B. de C.V. completed the purchase of U.S.\$218.9 million aggregate principal amount of the December 2019 U.S. Dollar Notes through a cash tender offer. On March 2, 2017, CEMEX, S.A.B. de C.V. completed the purchase of an additional U.S.\$89.9 million aggregate principal amount of the December 2019 U.S. Dollar Notes through a cash tender offer. All such December 2019 U.S. Dollar Notes purchased in the tender offers were immediately canceled. Following the settlement of the tender offers, U.S.\$618.2 million aggregate principal amount of the December 2019 U.S. Dollar Notes remained outstanding.

January 2021 and October 2018 U.S. Dollar Notes. On October 2, 2013, CEMEX, S.A.B. de C.V. issued the January 2021 and October 2018 U.S. Dollar Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Finance LLC, CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the January 2021 and October 2018 U.S. Dollar Notes. The payment of principal, interest and premium, if any, on such notes is secured by a firstpriority security interest over the Collateral and all proceeds of such Collateral. On May 12, 2016, CEMEX, S.A.B. de C.V. completed the purchase of U.S.\$178.5 million aggregate principal amount of the October 2018 U.S. Dollar Notes through a cash tender offer. All such October 2018 U.S. Dollar Notes purchased in the tender offer were immediately canceled. Following the settlement of the tender offer, U.S.\$319.5 million aggregate principal amount of the October 2018 U.S. Dollar Notes remained outstanding. On September 29, 2016, CEMEX, S.A.B. de C.V. commenced a tender offer to purchase up to U.S.\$500 million of the outstanding January 2021 U.S. Dollar Notes. On October 28, 2016, CEMEX, S.A.B. de C.V. announced that approximately U.S.\$241.9 million of the January 2021 U.S. Dollar Notes were validly tendered by holders of such notes. On March 2, 2017, CEMEX, S.A.B. de C.V. completed the purchase of an additional U.S.\$385.1 million aggregate principal amount of the January 2021 U.S. Dollar Notes through a cash tender offer. All such January 2021 U.S. Dollar Notes purchased in the tender offers were immediately canceled. Following the settlement of the tender offers, U.S.\$341.7 million aggregate principal amount of the January 2021 U.S. Dollar Notes remained outstanding.

*April 2024 U.S. Dollar and April 2021 Euro Notes*. On April 1, 2014, CEMEX Finance LLC issued the April 2024 U.S. Dollar and April 2021 Euro Notes in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX, S.A.B. de C.V., CEMEX México, CEMEX España,

New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group, CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX Finance LLC under the April 2024 U.S. Dollar and April 2021 Euro Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

January 2025 U.S. Dollar and January 2022 Euro Notes. On September 11, 2014, CEMEX, S.A.B. de C.V. issued the January 2025 U.S. Dollar and January 2022 Euro Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX Concretos, Empresas Tolteca, New Sunward, CEMEX España, CEMEX Asia, CEMEX Corp., CEMEX Finance LLC, Cemex Egyptian Investments, CEMEX France, CEMEX Research Group and CEMEX UK have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the January 2025 U.S. Dollar and January 2022 Euro Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

May 2025 U.S. Dollar and March 2023 Euro Notes. In March 2015, CEMEX, S.A.B. de C.V. issued the May 2025 U.S. Dollar and March 2023 Euro Notes in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX Concretos, Empresas Tolteca, New Sunward, CEMEX España, CEMEX Asia, CEMEX Corp., CEMEX Finance LLC, Cemex Egyptian Investments, CEMEX France, CEMEX Research Group and CEMEX UK, have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the May 2025 U.S. Dollar and March 2023 Euro Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

April 2026 U.S. Dollar Notes. On March 16, 2016, CEMEX, S.A.B. de C.V. issued the April 2026 U.S. Dollar Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX México, CEMEX España, New Sunward, CEMEX Asia, CEMEX Concretos, CEMEX Corp., CEMEX Finance LLC, CEMEX Egyptian Investments, CEMEX France, CEMEX Research Group and CEMEX UK and Empresas Tolteca have fully and unconditionally guaranteed the performance of all obligations of CEMEX, S.A.B. de C.V. under the April 2026 U.S. Dollar Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

June 2024 Euro Notes. On June 14, 2016, CEMEX Finance LLC issued the June 2024 Euro Notes, in transactions exempt from registration pursuant to Rule 144A and Regulation S under the Securities Act. CEMEX, S.A.B. de C.V., CEMEX México, CEMEX Concretos, Empresas Tolteca, New Sunward, CEMEX España, Cemex Asia, CEMEX Corp., Cemex Egyptian Investments, CEMEX France, Cemex Research Group and CEMEX UK have fully and unconditionally guaranteed the performance of all obligations of CEMEX Finance LLC under the June 2024 Euro Notes. The payment of principal, interest and premium, if any, on such notes is secured by a first-priority security interest over the Collateral and all proceeds of such Collateral.

#### Convertible Notes

March 2020 Optional Convertible Subordinated U.S. Dollar Notes. During 2015, CEMEX, S.A.B. de C.V. issued U.S.\$521 million (Ps8,977 million) aggregate principal amount of its March 2020 Optional Convertible Subordinated U.S. Dollar Notes. The March 2020 Optional Convertible Subordinated U.S. Dollar Notes were issued: (a) U.S.\$200 million as a result of the exercise on March 13, 2015 of U.S.\$200 million notional amount of CCUs (described below), and (b) U.S.\$321 million as a result of private exchanges with certain institutional

investors on May 28, 2015, which together with early conversions, resulted in a total of approximately U.S.\$626 million aggregate principal amount of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes held by such investors being paid and the issuance and delivery by CEMEX of an estimated 42 million ADSs, which included a number of additional ADSs issued to the holders as non-cash inducement premiums. The March 2020 Optional Convertible Subordinated U.S. Dollar Notes, which are subordinated to all of CEMEX's liabilities and commitments, are convertible into a fixed number of CEMEX, S.A.B. de C.V.'s ADSs at any time at the holder's election and are subject to antidilution adjustments. The difference at the exchange date between the fair value of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and the 42 million ADSs against the fair value of the March 2020 Optional Convertible Subordinated U.S. Dollar Notes, represented a loss of approximately Ps365 million recognized in 2015 as part of other financial (expense) income, net. The aggregate fair value of the conversion option as of the issuance dates which amounted to approximately Ps199 million was recognized in other equity reserves. As of December 31, 2015 and 2016, the conversion price per ADS was approximately U.S.\$11.90 and U.S.\$11.45, respectively. After antidilution adjustments, the conversion rate as of December 31, 2015 and 2016 was 84.0044 ADS and 87.36 ADS, respectively; per each U.S.\$1 thousand principal amount of such notes. See note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

November 2019 Mandatory Convertible Mexican Peso Notes. In December 2009, CEMEX, S.A.B. de C.V. completed an exchange offer of debt into mandatorily convertible securities in pesos for approximately U.S.\$315 million (Ps4,126 million) of the November 2019 Mandatory Convertible Mexican Peso Notes. Reflecting antidilution adjustments, the notes will be converted at maturity or earlier if the price of the CPO reaches approximately Ps29.50 into approximately 210 million CPOs at a conversion price of approximately Ps19.66 per CPO. During their tenure, holders have an option to voluntarily convert their securities on any interest payment date into CPOs. Considering the currency in which the notes are denominated and the functional currency of CEMEX, S.A.B. de C.V.'s financing division, the conversion option embedded in these securities is treated as a stand-alone derivative liability at fair value in the statement of operations, recognizing an initial effect of Ps365 million. See note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

March 2016 Optional Convertible Subordinated U.S. Dollar Notes and March 2018 Optional Convertible Subordinated U.S. Dollar Notes. On March 15, 2011, CEMEX, S.A.B. de C.V. closed the offering of U.S.\$978 aggregate principal amount of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and U.S.\$690 million (Ps8,211 million) aggregate principal amount of the March 2018 Optional Convertible Subordinated U.S. Dollar Notes. The notes are subordinated to all of CEMEX's liabilities and commitments. The notes are convertible into a fixed number of CEMEX, S.A.B. de C.V.'s ADSs, at the holder's election, and are subject to antidilution adjustments. As of December 31, 2015 and 2016, the conversion price per ADS was approximately U.S.\$9.27 and U.S.\$8.92, respectively. After antidilution adjustments, the conversion rate as of December 31, 2015 and 2016 was 107.8211 ADS and 112.1339 ADS, respectively; per each U.S.\$1 thousand principal amount of the March 2018 Optional Convertible Subordinated U.S. Dollar Notes. During 2015, we amended a portion of the capped calls relating to the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and, as a result, CEMEX received approximately U.S.\$44 million (Ps758 million) in cash, equivalent to the unwind of 44.2% of the total notional amount of such capped call. On March 15, 2016, the remaining options for the 55.8% of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes expired out of the money. During August 2016, we amended the capped calls relating to the March 2018 Optional Convertible Subordinated U.S. Dollar Notes and, as a result, the exercise price was adjusted to U.S.\$8.92 per ADS and the underlying to six million ADSs. See notes 16B and 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

#### **Commercial Commitments**

On July 30, 2012, we entered into a Master Professional Services Agreement with IBM. This agreement provides the framework for our contracting for IBM to provide us with the following services: information

technology, application development and maintenance, finance and accounting outsourcing, human resources administration and contact center services. The agreement provides for these services to be provided to us from July 30, 2012 until August 31, 2022, unless earlier terminated. Our minimum required payments to IBM under the agreement are approximately U.S.\$50 million per year. We will have the right to adjust the cost and quality of the services every two years if it is determined that they do not meet certain benchmarks. We may terminate the agreement (or a portion of it) at our discretion and without cause at any time by providing at least six-months' notice to IBM and paying termination charges consisting of IBM's unrecovered investment and breakage and wind-down costs. In addition, we may terminate the agreement (or a portion of it) for cause without paying termination charges. Other termination rights may be available to us for a termination charge that will vary with the reason for termination. IBM may terminate the agreement if we (i) fail to make payments when due or (ii) become bankrupt and do not pay in advance for the services.

In some countries, we have self-insured health care benefits plans for its active employees, which are managed on cost plus fee arrangements with major insurance companies or provided through health maintenance organizations. As of December 31, 2016, in certain plans, we have established stop-loss limits for continued medical assistance derived from a series of specific causes (e.g., an automobile accident, illness, etc.) ranging from U.S.\$23 thousand to U.S.\$400 thousand. In other plans, we have established stop-loss limits per employee regardless of the number of events ranging from U.S.\$100 thousand to U.S.\$2.5 million. The contingency for CEMEX if all employees qualifying for health care benefits required medical services simultaneously is significantly. However, this scenario is remote. The amount expensed through self-insured health care benefits was approximately U.S.\$64 million (Ps943 million) in 2014, U.S.\$69 million (Ps1,189 million) in 2015 and U.S.\$69 million (Ps1,430 million) in 2016. See note 23D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

As of December 31, 2016, we did not depend on any of our suppliers of goods or services to conduct our business.

# **Contractual Obligations**

As of December 31, 2015 and 2016, we had material contractual obligations as set forth in the table below.

		s of er 31, 2015	As of December 31, 2016					
Obligations	T	otal	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total	
			(in milli	ons of U.S.				
Long-term debt	U.S.\$	13,303	37	2,675	2,221	6,446	11,379	
Capital lease obligations(1)		135	18	36	33	20	107	
Convertible notes(2)		1,543	13	689	503		1,205	
Total debt and other financial obligations(3)		14,981	68	3,400	2,757	6,466	12,691	
Operating leases(4)		434	117	193	127	78	515	
Interest payments on debt(5)		4,659	678	1,240	969	1,109	3,996	
Pension plans and other benefits(6) Purchases of raw material, fuel and		1,568	142	277	269	726	1,414	
energy(7)		3,963	584	816	739	2,301	4,440	
Total contractual obligations	U.S.\$	25,605	1,589	5,926	4,861	10,680	23,056	
Total contractual obligations (Mexican Pesos)	Ps	441,174	32,934	122,787	100,720	221,290	477,720	

<sup>(1)</sup> Represents nominal cash flows. As of December 31, 2016, the net present value of future payments under such leases was approximately U.S.\$76 million (Ps1,576 million), of which, approximately U.S.\$24 million

- (Ps497 million) refers to payments from one to three years, approximately U.S.\$23 million (Ps389 million) refers to payments from three to five years and approximately U.S.\$16 million (Ps332 million) refers to payments of more than five years
- (2) Refers to the components of liability of the convertible notes described in note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report and assumes repayment at maturity and no conversion of the such convertible notes.
- (3) The schedule of debt payments, which includes current maturities, does not consider the effect of any refinancing of debt that may occur during the following years. In the past, we have replaced our long-term obligations for others of a similar nature.
- (4) The amounts represent nominal cash flows. We have operating leases, primarily for operating facilities, cement storage and distribution facilities and certain transportation and other equipment, under which annual rental payments are required plus the payment of certain operating expenses. Rental expense was U.S.\$114 million (Ps1,967 million) in 2015 and U.S.\$121 million (Ps2,507 million) in 2016.
- (5) Estimated cash flows on floating rate denominated debt were determined using the floating interest rates in effect as of December 31, 2015 and 2016.
- (6) Represents estimated annual payments under these benefits for the next ten years (see note 18 to our 2016 audited consolidated financial statements included elsewhere in this annual report). Future payments include the estimate of new retirees during such future years.
- (7) Future nominal payments for the purchase of raw materials are presented on the basis of contractual nominal cash flows. Future nominal payments of energy were estimated for all contractual commitments on the basis of an aggregate average expected consumption of approximately 3,124.1 GWh per year using the future prices of energy established in the contracts for each period. Future payments also include our commitments for the purchase of fuel.

As of December 31, 2014, 2015 and 2016, in connection with the commitments for the purchase of fuel and energy included in the table above, a description of the most significant contracts is as follows:

In connection with the beginning of full commercial operations of the Ventikas located in the Mexican state of Nuevo Leon with a combined generation capacity of 252 MW, we agreed to acquire a portion of the energy generated by Ventikas for our Mexican plants for a period of 20 years, which began in April 2016. During 2016, Ventikas supplied approximately 6.4% (unaudited) of our overall electricity needs in Mexico. This agreement is for our own use and we do not intend to engage in energy trading. Until our divestment in the fourth quarter of 2016, we participated in the Ventikas project as sponsor, main developer and equity investor. We, Fisterra Energy and private investors contributed 25% of the investment and the remaining 75% was financed. ACCIONA constructed the facilities and currently operates the wind farms. The installation of 84 wind turbines in the farms was finished in December 2015. On December 15, 2016, we sold our interest in Ventikas to Infraestructura Energética Nova S.A.B. de C.V., current sole owner of Ventikas, for approximately U.S.\$21 million (Ps435 million). In addition, during 2016 and in accordance with the established contracts we also received a total of U.S.\$35 million (Ps725 million) in development fees and other payments. We will remain the manager of the Ventikas facilities in exchange for a management fee.

In September 2006, in order to take advantage of the high wind potential in the "Tehuantepec Isthmus," we and ACCIONA formed an alliance to develop a wind farm project for the generation of 250 MW in the Mexican state of Oaxaca. We acted as promoter of the project, which was named EURUS. ACCIONA provided the required financing, constructed the facility and currently owns and operates the wind farm. The operation of the 167 wind turbines on the farm commenced on November 15, 2009. The agreements between us and ACCIONA established that our plants in Mexico will acquire a portion of the energy generated by the wind farm for a period of at least 20 years, which began in February 2010, when EURUS reached the committed limit capacity. For the years ended December 31, 2014, 2015 and 2016, EURUS supplied approximately 28.2%, 28.0% and 22.9%, respectively, of our overall electricity needs in Mexico during such years. In 1999, we entered into agreements with an international partnership, which financed, built and operated TEG, an electrical energy generating plant in Mexico. In 2007, the original operator was replaced. Pursuant to the agreement, we would purchase the energy

generated from TEG for a term of not less than 20 years, which started in April 2004 and that was further extended until 2027 with the change of operator. In addition, we committed to supply TEG and another third-party electrical energy generating plant adjacent to TEG all fuel necessary for their operations, a commitment that has been hedged through four 20-year agreements entered with PEMEX, which terminate in 2024. Consequently, for the last three years, CEMEX intends to purchase the required fuel in the market. For the years ended December 31, 2014, 2015 and 2016, TEG supplied approximately 69.6%, 69.3% and 66.3%, respectively, of our overall electricity needs during such year for our cement plants in Mexico.

In regards with the above, in March 1998 and July 1999, we signed contracts with PEMEX providing that beginning in April 2004 PEMEX's refineries in Cadereyta and Madero City would supply us with a combined volume of approximately 1.75 million tons of pet coke per year. As per the pet coke contracts with PEMEX, 1.2 million tons of the contracted volume will be allocated to TEG and the other energy producer and the remaining volume will be allocated to our operations in Mexico. By entering into the pet coke contracts with PEMEX, we expect to have a consistent source of pet coke throughout the 20-year term.

In 2007, CEMEX OstZement GmbH ("COZ"), our subsidiary in Germany, entered into a long-term energy supply contract with Vattenfall Europe New Energy Ecopower ("VENEE"), pursuant to which VENEE committed to supply energy to our Rüdersdorf plant for a period of 15 years starting on January 1, 2008. Based on the contract, each year COZ has the option to fix in advance the volume of energy that it will acquire from VENEE, with the option to adjust the purchase amount one time on a monthly and quarterly basis. According to the contract, COZ acquired approximately 27 MW per year from 2016 up to and including 2018, 15 MW for 2019, and COZ expects to acquire between 26 and 28 MW per year starting in 2020 and thereafter. The contract, which establishes a price mechanism for the energy acquired, based on the price of energy future contracts quoted on the European Energy Exchange, did not require initial investments and was expected to be performed at a future date. Based on its terms, this contract qualified as a financial instrument under IFRS. However, as the contract is for CEMEX's own use and CEMEX sells any energy surplus as soon as actual energy requirements are known, regardless of changes in prices and thereby avoiding any intention of trading in energy, such contract is not recognized at its fair value.

# **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements that are reasonably likely to have a material effect on our financial condition, operating results and liquidity or capital resources.

#### **Quantitative and Qualitative Market Disclosure**

#### Our Derivative Financial Instruments

For the year ended December 31, 2015, we had net losses related to the recognition of changes in fair values of derivative financial instruments of Ps2,981 million (U.S.\$173 million). For the year ended December 31, 2016, we had a net gain related to the recognition of changes in fair values of derivative financial instruments of Ps317 million (U.S.\$17 million). See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Since the beginning of 2009, with the exception of our capped call transaction entered into in March 2011, we have been reducing the aggregate notional amount of our derivatives, thereby reducing the risk of cash margin calls. This initiative has included closing substantially all notional amounts of derivative instruments related to our debt (currency and interest rate derivatives) and the settlement of our inactive derivative financial instruments (see note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report), which we finalized during April 2009. The Credit Agreement significantly restricts our ability to enter into derivative transactions.

We use derivative financial instruments in order to change the risk profile associated with changes in interest rates and foreign exchange rates of debt agreements, as a vehicle to reduce financing costs, as an

alternative source of financing, and as hedges of: (i) highly probable forecasted transactions, (ii) our net assets in foreign subsidiaries and (iii) future exercises of options under our executive stock option programs. Before entering into any transaction, we evaluate, by reviewing credit ratings and our business relationship according to our policies, the creditworthiness of the financial institutions and corporations that are prospective counterparties to our derivative financial instruments. We select our counterparties to the extent we believe that they have the financial capacity to meet their obligations in relation to these instruments. Under current financial conditions and volatility, we cannot assure that risk of non-compliance with the obligations agreed to with such counterparties is minimal.

The fair value of derivative financial instruments is based on estimated settlement costs or quoted market prices and supported by confirmations of these values received from the counterparties to these financial instruments. The notional amounts of derivative financial instrument agreements are used to measure interest to be paid or received and do not represent the amount of exposure to credit loss.

	At Decem	ber 31, 2015	At Decem	ber 31, 2016	
(in millions of U.S. Dollars)	Notional Amount	Estimated Fair value	Notional Amount	Estimated Fair value	Maturity Date
Interest Rate Swaps	157	28	147	23	September 2022
Equity forwards on third-party shares Options on CEMEX, S.A.B. de C.V.'s	24	6	_	_	October 2016
shares	1,145	12	576	26	March 2018
Foreign exchange forward contracts	173	(1)	80	_	February 2017
Fuels price hedging	16	(3)	_77	_15	May 2017 - October 2018
	1,515	42	880	64	

Our Interest Rate Swaps. As of December 31, 2015 and 2016, we had an interest rate swap maturing in September 2022 with notional amounts of U.S.\$157 million and U.S.\$147 million, respectively, negotiated to exchange floating for fixed rates in connection with agreements we entered into for the acquisition of electric energy in Mexico. As of December 31, 2015 and 2016, the fair value of the swap represented assets of approximately U.S.\$28 million and U.S.\$23 million, respectively. Pursuant to this instrument, during the tenure of the swap and based on its notional amount, we will receive a fixed rate of 5.4% and will pay at LIBOR. Changes in the fair value of interest rate swaps, generated losses of approximately U.S.\$1 million (Ps3 million) in 2014, approximately U.S.\$4 million (Ps69 million) in 2015 and approximately U.S.\$6 million (Ps112 million) in 2016, which were recognized in the statement of operations for each year. See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Our Equity Forwards on Third-Party Shares. On January 6, 2016, in connection with the merger of Alestra and Axtel effective beginning February 15, 2016, the forward contract between a financial counterparty and CEMEX, S.A.B. de C.V. over 59.5 million CPOs of Axtel was cash settled and as a result we received approximately U.S.\$4 million (Ps69 million), net of transaction costs. In a separate transaction, considering that as of December 31, 2015, CEMEX held an investment in Axtel that upon completion of the Alestra and Axtel merger would be exchanged proportionately according to the new ownership interests for shares in the new merged entity that will remain public and the attractive business outlook of such new entity, after the settlement of the Axtel forward contract, we decided to purchase in the market the 59.5 million CPOs of Axtel and incorporate them to CEMEX, S.A.B. de C.V.'s investments available for sale.

Our Options on Our Own Shares. On March 15, 2011, in connection with the offering of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes and the March 2018 Optional Convertible Subordinated U.S. Dollar Notes and to effectively increase the conversion price for CEMEX, S.A.B. de C.V.'s ADSs under such notes, CEMEX, S.A.B. de C.V. entered into capped call transactions after antidilution adjustments of over approximately 173 million ADSs (101 million ADSs maturing in March 2016 and 72 million ADSs maturing in

March 2018), by means of which, for the March 2016 Optional Convertible Subordinated U.S. Dollar Notes, at maturity of the notes in March 2016, if the price per ADS was above U.S.\$9.2746 dollars, we would have received in cash the difference between the market price of the ADS and U.S.\$9.2746 dollars, with a maximum appreciation per ADS of U.S.\$13.5552 dollars. Likewise, for the March 2018 Optional Convertible Subordinated U.S. Dollar Notes, at maturity of the notes in March 2018, if the price per ADS is above U.S.\$9.2746 dollars, we will receive in cash the difference between the market price of the ADS and U.S.\$9.2746 dollars, with a maximum appreciation per ADS of U.S.\$14.9821 dollars. We paid a total premium of approximately U.S.\$222 million. As of December 31, 2015 and 2016, the fair value of such options represented assets of approximately U.S.\$22 million (Ps379 million) and U.S.\$66 million (Ps1,368 million), respectively. During 2014, 2015 and 2016, changes in the fair value of this contract generated losses of approximately U.S.\$65 million (Ps962 million), losses of approximately U.S.\$228 million (Ps3,928 million) and gains of approximately U.S.\$44 million (Ps818 million), respectively, which were recognized in the statements of operations for each year. During 2015, CEMEX amended a portion of the capped calls relating to the March 2016 Optional Convertible Subordinated U.S. Dollar Notes with the purpose of unwinding the position, and as a result we received an aggregate amount of approximately U.S.\$44 million (Ps758 million) in cash, equivalent to the unwind of 44.2% of the total notional amount of such capped call. See note 16D to our 2016 audited consolidated financial statements included elsewhere in this annual report. In March 2016, CEMEX, S.A.B. de C.V. repaid the full outstanding amount (U.S.\$352 million) of the March 2016 Optional Convertible Subordinated U.S. Dollar Notes.

In addition, in connection with the November 2019 Mandatory Convertible Mexican Peso Notes (see note 16B to our 2016 audited consolidated financial statements included elsewhere in this annual report), and considering (i) the aforementioned change in CEMEX, S.A.B. de C.V.'s functional currency effective January 1, 2013 and (ii) that the currency in which such November 2019 Mandatory Convertible Mexican Peso Notes are denominated and the functional currency of the issuer differ, beginning January 1, 2013, we separate now the conversion option embedded in such instruments and recognizes it at fair value through profit or loss, which as of December 31, 2015 and 2016, resulted in a liability of approximately U.S.\$10 million (Ps178 million) and U.S.\$40 million (Ps829 million), respectively. Changes in fair value of the conversion option generated gains of U.S.\$11 million (Ps159 million) in 2014, gains of U.S.\$18 million (Ps310 million) in 2015 and losses of U.S.\$29 million) in 2016.

Foreign exchange forward contracts. As of December 31, 2016, we held foreign exchange forward contracts maturing in February 2017 to hedge the U.S. Dollar value of future proceeds in other currencies from expected sale of assets. As of December 31, 2015, we held foreign exchange forward contracts maturing in April 2016 to hedge the U.S. Dollar value of future proceeds in euros from the sale of our operations in Austria and Hungary. See note 4A to our 2016 audited consolidated financial statements included elsewhere in this annual report. For the years 2015 and 2016, changes in the estimated fair value of these instruments, including the effects resulting from positions entered and settled during each year, generated gains of U.S.\$26 million (Ps448 million) in 2015 and U.S.\$10 million (Ps186 million) in 2016, each recognized within "Other financial income (expense), net."

Fuel price hedging. As of December 31, 2015 and 2016, we maintained forward contracts negotiated to hedge the price of diesel fuel in the United Kingdom in 2015 and several countries in 2016 for aggregate notional amounts as of December 31, 2015 and 2016 of U.S.\$16 million (Ps276 million) and U.S.\$44 million (Ps912 million), respectively, with an estimated fair value representing a liability of U.S.\$3 million (Ps52 million) in 2015 and an estimated fair value representing an asset of U.S.\$7 million (Ps145 million) in 2016. By means of these contracts, for own consumption only, we fixed the fuel component of the market price of diesel over certain volumes representing a portion of the estimated diesel consumption in such operations. These contracts have been designated as cash flow hedges of diesel fuel consumption, and as such, changes in fair value are recognized temporarily through other comprehensive income (loss), and are recycled to operating expenses as the related diesel volumes are consumed. For the years 2015 and 2016, changes in fair value of these contracts recognized in other comprehensive income (loss) represented losses of U.S.\$3 million (Ps52 million) and gains of U.S.\$7 million (Ps145 million), respectively.

In addition, as of December 31, 2016, we held forward contracts negotiated in 2016 to hedge the price of coal, as solid fuel, for an aggregate notional amount of U.S.\$33 million (Ps684 million) and an estimated fair value representing an asset of U.S.\$8 million (Ps166 million). By means of these contracts, for own consumption only, we fixed the price of coal over certain volumes representing a portion of the estimated coal consumption in our applicable operations. These contracts have been designated as cash flow hedges of coal consumption, and as such, changes in fair value are recognized temporarily through other comprehensive income (loss), and are recycled to operating expenses as the related coal volumes are consumed. For the year ended December 31, 2016, changes in fair value of these contracts recognized in other comprehensive income (loss) represented gains of U.S.\$8 million (Ps166 million).

### Interest Rate Risk, Foreign Currency Risk and Equity Risk

Interest Rate Risk. The table below presents tabular information of our fixed and floating rate long-term foreign currency-denominated debt as of December 31, 2016. Average floating interest rates are calculated based on forward rates in the yield curve as of December 31, 2016. Future cash flows represent contractual principal payments. The fair value of our floating rate long-term debt is determined by discounting future cash flows using borrowing rates available to us as of December 31, 2016 and is summarized as follows:

	Expected maturity dates as of December 31, 2016									
Long-Term Debt(1)	2017		2018	2019	2020	After 2021	Total	Fair Value		
<u> </u>			(In	millions	of U.S. Doll	rcentages)				
Variable rate	U.S.\$	4	1,100	877	1,085	53	U.S.\$3,119	U.S.\$3,133		
Average interest rate	4.	.92%	4.32%	3.80%	3.80%	3.70%				
Fixed rate	U.S.\$	32	_	699	_	7,529	U.S.\$8,260	U.S.\$8,600		
Average interest rate	4.	.52%	_	6.50%	_	6.51%				

(1) The information above includes the current maturities of the long-term debt. Total long-term debt as of December 31, 2016 does not include our other financial obligations and the Perpetual Debentures for an aggregate amount of approximately U.S.\$438 million (Ps9,075 million) issued by consolidated entities. See notes 16B and 20D to our 2016 audited consolidated financial statements included elsewhere in this annual report.

As of December 31, 2016, we were subject to the volatility of floating interest rates, which, if such rates were to increase, may adversely affect our financing cost and our net income. As of December 31, 2015, 27% of our foreign currency-denominated long-term debt bears floating rates at a weighted average interest rate of LIBOR plus 367 basis points. As of December 31, 2016, 28% of our foreign currency-denominated long-term debt bears floating rates at a weighted average interest rate of LIBOR plus 306 basis points. As of December 31, 2015 and 2016, if interest rates at that date had been 0.5% higher, with all other variables held constant, CEMEX's net income for 2015 and 2016 would have been reduced by approximately U.S.\$18 million (Ps312 million) and U.S.\$18 million (Ps373 million), respectively, as a result of higher interest expense on variable-rate debt. However, this analysis does not include the interest rate swaps held by CEMEX during 2015 and 2016. See note 16E to our 2016 audited consolidated financial statements included elsewhere in this annual report.

Foreign Currency Risk. Due to our geographic diversification, our revenues are generated in various countries and settled in different currencies. However, some of our production costs, including fuel and energy, and some of our cement prices, are periodically adjusted to take into account fluctuations in the U.S. Dollar/ Mexican Peso exchange rate. For the year ended December 31, 2016, approximately 20% of our net sales, before eliminations resulting from consolidation, were generated in Mexico, 26% in the United States, 8% in the United Kingdom, 5% in France, 4% in Germany, 2% in Spain, 4% in the Rest of Europe, 5% in Colombia, 7% in the Rest of SAC, 3% in Egypt, 9% in the Rest of Asia, Middle East and Africa and 7% from our Other operations.

Foreign exchange gains and losses occur by monetary assets or liabilities in a currency different from its functional currency, and are recorded in the consolidated statements of operations, except for exchange

fluctuations associated with foreign currency indebtedness directly related to the acquisition of foreign entities and related parties' long-term balances denominated in foreign currency, for which the resulting gains or losses are reported in other comprehensive income (loss). As of December 31, 2015 and 2016, excluding from the sensitivity analysis the impact of translating the net assets of foreign operations into our reporting currency and considering a hypothetical 10% strengthening of the U.S. Dollar against the Mexican peso, with all other variables held constant, our net income for 2015 and 2016 would have increased by approximately U.S.\$232 million (Ps3,998 million) and U.S.\$136 million (Ps2,829 million), respectively, as a result of higher foreign exchange losses on our dollar-denominated net monetary liabilities held in consolidated entities with other functional currencies. Conversely, a hypothetical 10% weakening of the U.S. Dollar against the Mexican peso would have the opposite effect.

As of December 31, 2016, approximately 77% of our total debt plus other financial obligations was U.S. Dollar-denominated, approximately 21% was Euro-denominated, approximately 1% was Mexican Pesodenominated and immaterial amounts were denominated in other currencies, which does not include approximately Ps438 million (U.S.\$9,075 million) of Perpetual Debentures; therefore, we had a foreign currency exposure arising from the debt plus other financial obligations denominated in U.S. Dollars, and the debt and other financial obligations denominated in Euros, versus the currencies in which our revenues are settled in most countries in which we operate. We cannot guarantee that we will generate sufficient revenues in U.S. Dollars and Euros from our operations to service these obligations. As of December 31, 2015 and 2016, CEMEX had not implemented any derivative financing hedging strategy to address this foreign currency risk.

Equity Risk. As described above, we have entered into equity forward contracts on Axtel shares, as well as capped call options based on the price of CEMEX's own shares. See "Item 5—Operating and Financial Review and Prospects—Quantitative and Qualitative Market Disclosure—Our Derivative Financial Instruments—Our Options on Our Own Shares." Under these equity derivative instruments, there is a direct relationship in the change in the fair value of the derivative with the change in price of the underlying share. Upon liquidation, the equity forward contracts provided for cash settlement and the effects were recognized in the statement of operations as part of "Other financial income, net" in our 2016 audited consolidated financial statements included elsewhere in this annual report. A significant decrease in the market price of CEMEX's own shares would negatively affect CEMEX's liquidity and financial position.

As of December 31, 2015, the potential change in the fair value of CEMEX's forward contracts in Axtel's shares that would result from a hypothetical, instantaneous decrease of 10% in the market price of Axtel's CPOs, with all other variables held constant, our net income for 2015 would have reduced by approximately U.S.\$3 million (Ps51 million) as a result of additional negative changes in fair value associated with such forward contracts. A 10% hypothetical increase in the Axtel CPO price would have generated approximately the opposite effects.

As of December 31, 2015 and 2016, the potential change in the fair value of our options (capped call) and based on the price of CEMEX, S.A.B. de C.V.'s ADSs that would result from a hypothetical, instantaneous decrease of 10% in the market price of CEMEX, S.A.B. de C.V.'s ADSs, with all other variables held constant, our net income for 2015 would have reduced by approximately U.S.\$8 million (Ps137 million) and our net income for 2016 would have reduced by approximately U.S.\$23 million (Ps476 million) and, as a result of additional negative changes in fair value associated with these contracts. A 10% hypothetical increase in our ADS price would generate approximately the opposite effect.

In addition, even though the change in fair value of our embedded conversion options in the November 2019 Mandatory Convertible Mexican Peso Notes denominated in a currency other than the functional issuer's currency affect profit or loss, they do not imply any risk or variability in cash flows, considering that through their exercise, we will settle a fixed amount of debt with a fixed amount of shares. As of December 31, 2015 and 2016, the potential change in the fair value of these embedded conversion options in the November 2019 Mandatory Convertible Mexican Peso Notes that would result from a hypothetical, instantaneous decrease of

10% in the market price of CEMEX, S.A.B. de C.V.'s CPOs, with all other variables held constant, would have increased our net income for 2015 by approximately U.S.\$3 million (Ps47 million) and our net income for 2016 would have increased by approximately U.S.\$7 million (Ps154 million), respectively, as a result of additional positive changes in fair value associated with this option. A 10% hypothetical increase in the CPO price would generate approximately the opposite effect.

Liquidity risk. We are exposed to risks from changes in foreign currency exchange rates, prices and currency controls, interest rates, inflation, governmental spending, social instability and other political, economic and/or social developments in the countries in which we operate, any one of which may materially affect our results and reduce cash from operations. As of December 31, 2016, we had approximately U.S.\$849 million (Ps17,591 million) available in our committed revolving credit tranche under the Credit Agreement. See notes 16A and 23E to our 2016 audited consolidated financial statements included elsewhere in this annual report.

# **Investments, Acquisitions and Divestitures**

The transactions described below represent our principal investments, acquisitions and divestitures completed during 2014, 2015 and 2016.

# **Investments and Acquisitions**

On April 10, 2014, we successfully completed the financing of Ventika, a project comprising the construction of two 126 MW wind farms each, for a total nominal capacity of 252 MW located in Nuevo León, Mexico. The investment for the project is approximately U.S.\$650 million (approximately Ps9,581 million), of which 75% correspond to debt and 25% to equity. The project includes debt financiers, equity partners, private investors and CEMEX. In addition, we agreed to supervise the construction process and, once operational, to manage the wind farms without exercising control and owning a minority stake of 5% of the equity. We divested in the fourth quarter of 2016 and, therefore, the project will not be consolidated into our balance sheet and the project's debt will have no recourse to ours. These wind farms will supply renewable energy to facilities belonging to several local companies including us, under the self-supply scheme approved by the Mexican Energy Regulatory Commission.

On August 14, 2014, we announced that our subsidiary, CEMEX Latam began the construction of a cement plant in Colombia. See "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings," for the status of the project.

On October 31, 2014, we announced that we had entered into agreements with Holcim to complete a series of transactions in Europe, which closed on January 5, 2015, with retrospective effect as of January 1, 2015. See note 15B to our 2016 audited consolidated financial statements included elsewhere in this annual report.

On December 1, 2014, we announced the restart of the Tepeaca cement plant expansion in México. By 2018 the total production capacity will reach 7.5 million tons per year and the total investment is estimated to be approximately U.S.\$650 million. The additional investment, in order to add 4.4 million tons per year to the current capacity, will be approximately U.S.\$200 million.

On May 14, 2015, we announced a new 1.5 million ton integrated cement production line at CEMEX's Solid plant in Luzon with an estimated investment of approximately U.S.\$225 million. We expect that this new line will double the capacity of the Solid plant and will represent a 26% increase in our cement capacity in the Philippines. As of December 31, 2016, the production line was not finalized.

On August 27, 2015, we completed the construction of the first phase of a new cement grinding plant in Nicaragua. CEMEX Latam invested approximately U.S.\$30 million for infrastructure procurement and the installation of the first cement grinding mill. The second phase, which is expected to be completed by the end of

2017, will include the installation of a second cement grinding mill and an additional investment of approximately U.S.\$25 million. Upon completion of the second phase, CEMEX Nicaragua is expected to reach an estimated total annual cement production capacity of approximately 860,000 tons.

On December 5, 2016, Sierra presented an Offer to all shareholders of TCL, a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL, which, together with Sierra's existing share ownership in TCL of approximately 39.5%, would, if successful, result in Sierra holding up to 74.9% of the equity share capital in TCL. The total number of TCL shares tendered and accepted in response to the Offer was 113,629,723, which, together with Sierra's pre-existing shareholding in TCL (147,994,188 shares), represented approximately 69.83% of the outstanding TCL shares as of March 31, 2017. The total cash payment by Sierra for the tendered shares was approximately U.S.\$86.36 million. CEMEX started consolidating TCL for financial reporting purposes on February 1, 2017. TCL has de-listed from the Jamaica and Barbados stock exchanges.

#### Divestitures

During 2015 and 2016, we made divestitures of approximately U.S.\$670 million and U.S.\$1,045 million, respectively (which included fixed assets of approximately U.S.\$194 million and U.S.\$121 million, respectively).

On October 31, 2015, after all conditions precedent were satisfied, we completed the sale of our operations in Austria and Hungary to the Rohrdorfer Group for €165 million (U.S.\$179 million or Ps3,090 million) after final adjustments for changes in cash and working capital balances as of the transfer date. Our combined operations in Austria and Hungary consisted of 29 aggregate quarries and 68 ready-mix plants. Our consolidated statements of operations present the results of our operations in Austria and Hungary, net of income tax, for the year ended December 31, 2014 and the ten-month period ended October 31, 2015 as "Discontinued operations" and include, in 2015, a gain on sale of approximately U.S.\$45 million (Ps741 million). Such gain on sale includes the reclassification to the statement of operations of approximately U.S.\$10 million (Ps215 million) of foreign currency translation effects accrued in equity until October 31, 2015.

On March 10, 2016, CEMEX, S.A.B. de C.V. announced the sale of its operations in Bangladesh and Thailand to SIAM Cement for approximately U.S.\$53 million, which closed on May 26, 2016. The proceeds from this transaction were used mainly for debt reduction and for general corporate purposes.

On July 18, 2016, CHP closed its initial public offering of 45% of its common shares in the Philippines, and 100% of CHP's common shares started trading on the Philippine Stock Exchange under the ticker "CHP." As of March 31, 2017, CASE, an indirect subsidiary of CEMEX España, directly owned approximately 55% of CHP's outstanding common shares. The net proceeds to CHP from its initial public offering were approximately U.S.\$506.8 million after deducting estimated underwriting discounts and commissions, and other estimated offering expenses payable by CHP. CHP used the net proceeds from the initial public offering to repay existing indebtedness owed to BDO Unibank and to an indirect subsidiary of CEMEX. CHP's assets consist primarily of CEMEX's cement manufacturing assets in the Philippines.

On August 29, 2016, we announced that we would be participating in the proposed corporate restructuring of GCC. In connection with the corporate restructuring, if approved by GCC's shareholders as proposed, CEMEX would directly own 23% of the outstanding share capital of GCC and, additionally, own a minority interest in CAMCEM, an entity which in turn would own a majority interest in GCC as a result of the proposed restructuring. On the same day, we also announced that we reached an agreement with GCC on the terms and conditions regarding the sale to GCC of certain assets in the U.S. On February 15, 2017, we sold 45,000,000 shares of common stock of GCC at a price of Ps95 per share in a public offering to investors in Mexico authorized by the CNBV and in a concurrent private placement to eligible investors outside of Mexico. Prior to the offerings, CEMEX, S.A.B. de C.V. owned a 23% direct interest in GCC and a minority interest in CAMCEM, an entity which owns a majority interest in GCC. After the offerings, CEMEX, S.A.B. de C.V. owned a 9.47% direct interest in GCC and the minority interest in CAMCEM.

On September 12, 2016, one of our subsidiaries in the U.S. signed a definitive agreement for the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle Materials Inc. for U.S.\$400 million. The proceeds obtained from this transaction were used mainly for debt reduction and for general corporate purposes. This transaction closed on February 10, 2017.

On November 18, 2016, after all conditions precedent were satisfied, CEMEX announced that it had closed the sale of certain assets in the U.S. to GCC for approximately U.S.\$306 million. The assets were sold by an affiliate of CEMEX to an affiliate of GCC in the U.S., and mainly consisted of CEMEX's cement plant in Odessa, Texas, two cement terminals and the building materials business in El Paso, Texas and Las Cruces, New Mexico

On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

### **Recent Developments**

# Recent Developments Relating to Our Indebtedness

On February 1, 2017, CHP announced that it had entered into a senior unsecured peso term loan facility agreement with BDO Unibank for a Philippine Peso denominated amount equal to approximately U.S.\$280 million, to refinance a majority of CHP's outstanding long-term loan with New Sunward. The term loan provided by BDO Unibank has a tenor of seven years and it consists of a fixed rate and a floating rate tranche. CHP has drawn the full amount of the term loan.

During March 2017, we renewed the securitization programs outstanding in the United States, France and the United Kingdom. As a result of such renewals, each program is now scheduled to mature in March 2018. The securitization program in Mexico was settled and paid down in March 2017.

On February 13, 2017, CEMEX, S.A.B. de C.V. commenced a tender offer to purchase up to U.S.\$475 million aggregate principal amount of the outstanding January 2021 U.S. Dollar Notes, December 2019 U.S. Dollar Notes and October 2022 U.S. Dollar Notes. On February 28, 2017, CEMEX, S.A.B. de C.V. announced that U.S.\$385.1 million aggregate principal amount of the January 2021 U.S. Dollar Notes, U.S.\$240.7 million aggregate principal amount of the December 2019 U.S. Dollar Notes and U.S.\$626.7 million aggregate principal amount of the January 2021 U.S. Dollar Notes, U.S.\$89.9 million aggregate principal amount of the January 2021 U.S. Dollar Notes, U.S.\$89.9 million aggregate principal amount of the December 2019 U.S. Dollar Notes and none of the October 2022 U.S. Dollar Notes were purchased in the tender offer and immediately canceled. Following the settlement of the tender offer, approximately U.S.\$341.7 million aggregate principal amount of the January 2021 U.S. Dollar Notes, U.S.\$618.2 million aggregate principal amount of the December 2019 U.S. Dollar Notes and U.S.\$1,055.6 million aggregate principal amount of the October 2022 U.S. Dollar Notes remained outstanding.

During the first quarter of 2017, we repurchased U.S.\$9 million aggregate principal amount of Senior Secured Notes on the open market (all of which have been canceled).

# Recent Developments Relating to Equity Purchases

On December 5, 2016, Sierra presented an Offer to all shareholders of TCL, a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL, which, together with Sierra's existing share ownership in TCL of approximately 39.5%, would, if successful, result in Sierra holding up to 74.9% of the equity share capital in TCL. The total number of TCL shares tendered and accepted in response to the Offer was 113,629,723, which, together with Sierra's pre-existing shareholding in TCL (147,994,188 shares), represented approximately 69.83% of the outstanding TCL shares as of March 31, 2017. The total cash payment by Sierra for the tendered shares was approximately U.S.\$86.36 million. CEMEX started consolidating TCL for financial reporting purposes on February 1, 2017. TCL has de-listed from the Jamaica and Barbados stock exchanges.

### Recent Developments Relating to Our Assets Divestiture Plans

On January 31, 2017, one of CEMEX, S.A.B. de C.V.'s subsidiaries in the U.S. closed the sale of the Concrete Pipe Business to Quikrete for U.S.\$500 million plus an additional U.S.\$40 million purchase price contingent on future performance.

On February 10, 2017, one of our subsidiaries in the U.S. closed the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle Materials Inc. for U.S.\$400 million. The proceeds obtained from this transaction were used mainly for debt reduction and for general corporate purposes.

On February 15, 2017, we sold 45,000,000 shares of common stock of GCC at a price of Ps95 per share in a public offering to investors in Mexico authorized by the CNBV and in a concurrent private placement to eligible investors outside of Mexico. Prior to the offerings, CEMEX, S.A.B. de C.V. owned a 23% direct interest in GCC and a minority interest in CAMCEM, an entity which owns a majority interest in GCC. After the offerings, CEMEX, S.A.B. de C.V. owned a 9.47% direct interest in GCC and the minority interest in CAMCEM.

On August 12, 2015, we entered into an agreement for the sale of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, to Duna-Dráva Cement Kft. for €231 million (approximately U.S.\$243 million or Ps5,032 million). Those operations mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. On April 5, 2017, we announced that the European Commission issued a decision that restricts completion of the sale. Therefore, the sale of our operations in Croatia will not close and we will maintain our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in our statements of operations are presented in the single line item "Discontinued operations." However, due to the inability to complete the sale, beginning in the second quarter of 2017, we will reclassify the income statements of our operations in Croatia, including assets in Bosnia & Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each applicable line item in our consolidated financial statements. See notes 4A and 26 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

On April 17, 2017, CEMEX, S.A.B. de C.V. announced that one of its subsidiaries in the U.S. had entered into a definitive agreement for the sale of Pacific Northwest to Cadman Materials, a LehighHanson company and U.S. subsidiary of HeidelbergCement Group, for U.S.\$150 million. Pacific Northwest consists of aggregates, asphalt and ready-mix concrete operations in Oregon and Washington. Pending satisfaction of certain conditions, including regulatory approvals, the proceeds obtained from this sale will be used mainly for debt reduction and general corporate purposes.

# Recent Developments Relating to Our Shareholders

On March 30, 2017, CEMEX, S.A.B. de C.V. held an Ordinary General Shareholders Meeting. The most significant items that were approved by shareholders at the meeting were:

- An increase of CEMEX, S.A.B. de C.V's capital stock in its variable part by the amount of Ps716,365.38 through the issuance of up to 258,000,000 ordinary common registered shares without nominal value, of which up to 172,000,000 will be Series A and up to 86,000,000 will be Series B, with the same characteristics and the same rights of the currently outstanding shares. These shares will be kept in treasury and will be destined to preserve the right of conversion of the holders of our convertible notes.
- The appointment of the members of CEMEX, S.A.B. de C.V.'s Board of Directors, including new directors Ramiro Gerardo Villarreal Morales and Marcelo Zambrano Lozano.

# Recent Developments Relating to Our Board of Directors and Senior Management

On February 14, 2017, we announced that Ramiro Gerardo Villarreal Morales, Executive Vice President of Legal and Secretary of the Board of Directors of CEMEX, S.A.B. de C.V., will retire effective as of June 1, 2017. Starting as of June 1, 2017, the corporate legal function at CEMEX, S.A.B. de C.V. will be headed by Roger Saldaña Madero as Senior Vice President of Legal. He will report to José Antonio González Flores, Executive Vice President of Finance and CFO of CEMEX, S.A.B. de C.V. Ramiro Gerardo Villarreal Morales will thereafter act as an advisor to the Chairman of the Board of Directors and CEO of CEMEX, S.A.B. de C.V.

As described under "— Recent Developments Relating to Our Shareholders," on March 30, 2017, Ramiro Gerardo Villarreal Morales and Marcelo Zambrano Lozano were appointed as members of CEMEX, S.A.B. de C.V.'s Board of Directors. Additionally, Rogelio Zambrano Lozano, Roger Saldaña Madero and René Delgadillo Galván were elected as Chairman, Secretary and Assistant Secretary of the Board of Directors of CEMEX, S.A.B. de C.V., respectively.

Name, Position (Age)

Marcelo Zambrano Lozano (61)

Experience

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since March 31, 2017. Mr. Zambrano is a founding member and Executive Chairman of the board of directors of Carza, S.A. de C.V. In addition, Mr. Zambrano is a member of the boards of directors of several companies and institutions such as the National Council of Telmex, Green Paper (*Propasa*), Banregio, S.A., Fibra Inn, NAFIN (Nacional Financiera Nuevo Leon Delegation), Universidad de Monterrey (UDEM), Grupo Vigia, Instituto Tecnológico y de Estudios Superiores de Monterrey and the Treviño Elizondo Foundation. He was a member of CEMEX México's board of directors until February 2017. Mr. Zambrano is a graduate of the Instituto Tecnológico y de Estudios Superiores de Monterrey with a degree in marketing. He is a brother of Rogelio Zambrano Lozano, Chairman of CEMEX, S.A.B. de C.V.'s Board of Directors.

# Item 6—Directors, Senior Management and Employees

# **Senior Management and Directors**

# Senior Management

Set forth below is the name and position of each member of our senior management team as of December 31, 2016. The terms of office of the senior managers are indefinite.

Name, Position (Age)

Fernando Ángel González Olivieri, Chief Executive Officer (62)

Juan Romero Torres, President CEMEX México (60)

#### Experience

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since March 26, 2015, and he is also a member of the boards of directors of GCC, Axtel and the Instituto Tecnológico y de Estudios Superiores de Monterrey. He was a member of the board of directors of CEMEX México until February 2017. Mr. González earned his B.A. and M.B.A. degrees from the Instituto Tecnológico y de Estudios Superiores de Monterrey. He joined CEMEX in 1989, and served as Corporate Vice President of Strategic Planning from 1994 to 1998, President of CEMEX Venezuela, S.A.C.A. from 1998 to 2000, President of CEMEX Asia from 2000 to May 2003, and President of CEMEX's former South American and Caribbean Region from May 2003 to February 2005. In March 2005, he was appointed President of the expanded CEMEX European Region, in February 2007, President of CEMEX's former Europe, Middle East, Africa, Asia and Australia Region, and, in May 2009, Executive Vice President of Planning and Development. In February 2010, Mr. González was appointed Executive Vice President of Planning and Finance, and, in 2011, he was additionally appointed Chief Financial Officer. On May 15, 2014, Mr. González was appointed as CEMEX's Chief Executive Officer.

Joined CEMEX in 1989 and has occupied several senior management positions, including President of CEMEX Colombia, President of our operations in Mexico, President of the South America and the Caribbean Regions and President of our former Europe, Middle East, Africa and Asia Region. He is currently President of our operations in Mexico and is also in charge of our global procurement area. Mr. Romero graduated from Universidad de Comillas in Spain, where he studied law and economic and enterprise sciences. Mr. Romero was appointed Vice President and representative of the board of directors of the National Chamber of Cement (*Cámara Nacional del Cemento*) in June 2011, and is also a member of the board of directors of GCC.

# Name, Position (Age)

Jaime Gerardo Elizondo Chapa, President CEMEX Europe (53)

Ignacio Madridejos Fernández, President CEMEX USA (51)

Jaime Muguiro Domínguez, President CEMEX South, Central America and the Caribbean (48)

#### Experience

Joined CEMEX in 1985 and since then he has headed several operations, including Panama, Colombia, Venezuela and Mexico, and more recently was President of CEMEX South America (including Central America) and the Caribbean. He is the current President of CEMEX Europe, and is also in charge of CEMEX's global technology area. Mr. Elizondo served as President and Vice President of the National Chamber of Cement (Cámara Nacional del Cemento) and as Vice President of the Transformation Industry Chamber of Nuevo León (Cámara de la Industria de la Transformación de Nuevo León). Mr. Elizondo is currently the Vice Chairman of CEMEX Latam's board of directors. He graduated with a B.S. in chemical and system engineering and an M.B.A. from ITESM.

Joined CEMEX in 1996 and, after holding management positions in the Strategic Planning area, he headed CEMEX's operations in Egypt, Spain, Western Europe and Northern Europe. He is currently President of CEMEX USA, and is also responsible for our Global Energy, Health and Safety and Sustainability areas. Mr. Madridejos Fernández is also a member of the board of directors of CEMEX Latam. He has served as a member of the board of directors of COMAC (Comercial de Materiales de Construcción S.L.). member of the board and President of OFICEMEN, member of the board and President of IECA (Instituto Español del Cemento y sus Aplicaciones), President of CEMA (Fundación Laboral del Cemento y el *Medioambiente*). Patron of the Junior Achievement Foundation and Vice President and Chairman of CEMBUREAU (European Cement Association), member of the board of Inversiones Danaime SICAV S.A. and member of the board of CEMEX Latam. He graduated with a degree in civil engineering from the Universidad Politécnica de Madrid and holds an M.B.A. from Stanford University.

Joined CEMEX in 1996 and has held several executive positions in the areas of Strategic Planning, Business Development, Ready-mix Concrete, Aggregates, and Human Resources. He headed CEMEX's operations in Egypt and our former Mediterranean Region. He is currently President of CEMEX's SAC Region, and Chief Executive Officer of CEMEX Latam. He graduated with a management degree from San Pablo CEU University, and holds a law degree from the Universidad Complutense de Madrid and an M.B.A. from the Massachusetts Institute of Technology.

Name, Position (Age)

Joaquín Miguel Estrada Suarez, President CEMEX Asia, Middle East and Africa (53)

Joined CEMEX in 1992 and has held several executive positions, including head of operations in Egypt and Spain, as well as head of Trading for Europe, the Middle East and Asia. He is currently President of CEMEX Asia, Middle East and Africa and is also responsible for our global trading activities. He is also the Chairman of the board of directors of CHP. From 2008 to 2011, he served as a member of the board of directors of COMAC (Comercial de Materiales de Construcción S.L.). President and member of the board of OFICEMEN, and member of the board of IECA (Instituto Español del Cemento y sus Aplicaciones). He was also the President of CEMA (Fundación Laboral del Cemento y el Medioambiente) from 2010 to 2011. He graduated with a degree in economics from the Universidad de Zaragoza and holds an M.B.A. from the Instituto de Empresa.

Experience

José Antonio González Flores, Executive Vice President of Finance and Chief Financial Officer (46) Joined CEMEX in 1998 and since then has held management positions in corporate and operating areas in Finance, Strategic Planning, and Corporate Communications and Public Affairs. He is currently responsible for CEMEX's Finance, Controllership, Tax and Process Assessment areas, and will be responsible for the Legal area as of June 2017. Mr. González is also a member of the board of directors of GCC and is an alternate director of the board of directors of Axtel. Mr. González has a B.S. in Industrial and Management Systems Engineering from ITESM and an M.B.A. from Stanford University.

Juan Pablo San Agustín Rubio, Executive Vice President of Strategic Planning and New Business Development (48) Joined CEMEX in 1994 and has held executive positions in the Strategic Planning, Continuous Improvement, E-business, and Marketing areas. He is currently Executive Vice President of Strategic Planning and New Business Development. Mr. San Agustín is Chairman of the board of directors of CEMEX Latam. He graduated with a B.S. from the Universidad Metropolitana and holds an International M.B.A. from the Instituto de Empresa.

Luis Hernández Echávez, Executive Vice President of Administration and Organization (53) Joined CEMEX in 1996 and has held senior management positions in the Strategic Planning and Human Resources areas. He is currently Executive Vice President of Administration and Organization. He graduated with a degree in civil engineering from ITESM, and holds a master's degree in civil engineering and an M.B.A. from the University of Texas at Austin. Mr. Hernández is also a member of the board of directors of GCC.

# Name, Position (Age)

Maher Al-Haffar, Executive Vice President of Investor Relations, Corporate Communications and Public Affairs (59)

Mauricio Doehner Cobián, Executive Vice President of Corporate Affairs and Enterprise Risk Management (42)

Rafael Garza Lozano, Chief Accounting Officer (53)

Ramiro Gerardo Villarreal Morales, Executive Vice President of Legal (69)

#### Experience

Joined CEMEX in 2000. Prior to his current position he was Vice President of Investor Relations, Corporate Communications and Public Affairs. He also served as a Managing Director in Finance and Head of Investor Relations for CEMEX. Before joining CEMEX, he spent nineteen years with Citicorp Securities Inc. and Santander Investment Securities as an investment banker and capital markets professional. Mr. Al-Haffar holds a B.S. in Economics from the University of Texas and a Master's Degree in International Relations and Finance from Georgetown University.

Joined CEMEX in 1996 and has held several executive positions in areas such as Strategic Planning and Enterprise Risk Management for Europe, Asia, the Middle East, South America and Mexico. He is currently in charge of Corporate Affairs and Enterprise Risk Management. He has also worked in the public sector within the Mexican Presidency. Mr. Doehner earned his B.A. in Economics from ITESM and holds an M.B.A. from IESE/IPADE. He also holds a Professional Certification in Competitive Intelligence from the FULD Academy of Competitive Intelligence in Boston, Massachusetts.

Joined CEMEX in 1985 and has served as Chief Accounting Officer since 1999. Mr. Garza is a certified public accountant and he received a master's degree in administration and finance from ITESM. He also attended executive programs at ITAM, IPADE and Harvard University. He is currently a member of the board of directors of Consejo Mexicano para la Investigación y Desarrollo de Normas de Información Financiera and an alternate member of the board of directors of GCC.

Joined CEMEX in 1987 and has served as General Counsel since then. He served as Secretary of CEMEX, S.A.B. de C.V.'s Board of Directors from 1995 to March 30, 2017. He was the Secretary of CEMEX México's board of directors until February 2017. Mr. Villarreal will retire as General Counsel of CEMEX effective as of June 1, 2017 and from CEMEX, S.A.B. de C.V. effective as of December 31, 2017. After retiring as General Counsel of CEMEX, he will serve as advisor to the Chairman of the Board of Directors and to the Chief Executive Officer of CEMEX, S.A.B. de C.V. He is a

Name, Position (Age) Experience

graduate of the Universidad Autónoma de Nuevo León with a degree in law with honorary citation. He also received a master of science degree in finance from the University of Wisconsin and was appointed to the Roll of Honor. Prior to joining CEMEX, he served as deputy general director of Grupo Financiero Banpaís from 1985 to 1987.

Mr. Villarreal has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since March 30, 2017. He is also a member of the boards of directors of GCC, Vinte Viviendas Integrales, S.A.B. de C.V., a real estate development company, and a member of the board of directors of Grupo Acosta Verde and an alternate member of the board of directors of Axtel. Until February 2012, Mr. Villarreal was the Secretary of the board of directors of Enseñanza e Investigación Superior, A.C., which manages Instituto Tecnológico y de Estudios Superiores de Monterrey.

### **Board of Directors**

Rafael Rangel Sostmann was a member of CEMEX, S.A.B. de C.V.'s Board of Directors. Mr. Rangel Sostmann was not elected as a director at CEMEX, S.A.B. de C.V.'s 2015 annual general ordinary shareholders' meeting held on March 31, 2016, and no longer serves on the Board of Directors. Set forth below are the names of the members of CEMEX, S.A.B. de C.V.'s Board of Directors as of December 31, 2016. For a description of changes to CEMEX, S.A.B. de C.V.'s Board of Directors in 2017, see the description of CEMEX, S.A.B. de C.V.'s 2016 annual general ordinary shareholders' meeting held on March 30, 2017 in "Item 5—Operating and Financial Review and Prospects—Recent Developments—Recent Developments Relating to Our Board of Directors and Senior Management." No alternate directors were elected at CEMEX, S.A.B. de C.V.'s 2016 annual general ordinary shareholders' meeting. Members of CEMEX, S.A.B. de C.V.'s Board of Directors serve for one-year terms.

Name (Age)

Rogelio Zambrano Lozano, Chairman (60) Experience

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 1987 and Chairman of CEMEX, S.A.B. de C.V.'s Board of Directors since May 15, 2014. He was President of CEMEX, S.A.B. de C.V.'s Finance Committee from 2009 until March 2015 and he was also Chairman of CEMEX México's board of directors until February 2017. He is also a member of the advisory board of Grupo Financiero Banamex, Zona Norte, and member of the boards of directors of Carza, S.A. de C.V. and the Instituto Tecnológico y de Estudios Superiores de Monterrey, among others. He holds an industrial and systems engineering degree from the Instituto Tecnológico y de Estudios Superiores de Monterrey and an M.B.A. from the Wharton Business School of Pennsylvania University. He is a grandson of the late Mr. Lorenzo Zambrano Gutiérrez, one of CEMEX, S.A.B. de C.V.'s founders, and a son of Mr. Marcelo

Zambrano Hellión, who was a member of CEMEX, S.A.B. de C.V.'s Board of Directors from 1957 until his passing away and its Chairman from 1979 to 1995. He is also a second cousin of Roberto Luis Zambrano Villarreal, a second uncle of Tomás Milmo Santos, and a second uncle of Ian Christian Armstrong Zambrano, all members of CEMEX, S.A.B. de C.V.'s Board of Directors.

See "- Senior Management."

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 2006 and member of CEMEX, S.A.B. de C.V.'s Finance Committee from 2009 until March 2015. Mr. Milmo Santos served as an alternate member of CEMEX, S.A.B. de C.V.'s Board of Directors from 2001 to 2006. He is Co-Chairman of the board of directors of Axtel. He is also a member of the boards of directors of Promotora Ambiental, S.A., the Instituto Tecnológico y de Estudios Superiores de Monterrey and Chairman of the board of directors of Tec Salud and Alianza Educativa por Nuevo León. He was a member of CEMEX México's board of directors until February 2017. He graduated with a degree in economics from Stanford University. Mr. Milmo Santos is a second nephew of Rogelio Zambrano Lozano, Chairman of CEMEX, S.A.B. de C.V.'s Board of Directors.

Ian Christian Armstrong Zambrano (36) ......

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since March 26, 2015. He had previously been a provisional member of CEMEX, S.A.B. de C.V.'s Board of Directors since May 15, 2014. He is a former Vice President of Promotion and Analysis at Evercore Casa de Bolsa, and currently is a founding member and President of Biopower, a founding member of RIC Energy Mexico and a member of the boards of directors of Tec Salud and Fondo Zambrano Hellión. Mr. Armstrong Zambrano is a graduate in business administration from the Instituto Tecnológico y de Estudios Superiores de Monterrey and holds an M.B.A. from the IE Business School. He is a second nephew of Rogelio Zambrano Lozano, Chairman of CEMEX, S.A.B. de C.V.'s Board of Directors.

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 1983. He initially joined CEMEX in 1975 and rejoined CEMEX in 1985. He served as Director of Operational and Strategic Planning from 1985 to 1988, Director of Operations from 1988 to 1991, Director of Corporate Services

and Affiliate Companies from 1991 to 1994, Director of Development from 1994 to 1996, General Director of Development from 1996 to 2000, Executive Vice President of Development from 2000 to May 2009, and Executive Vice President for Technology, Energy and Sustainability from May 2009 to March 2010. He is a graduate of the Instituto Tecnológico y de Estudios Superiores de Monterrey with a degree in mechanical engineering and administration and he received an M.B.A. from the University of Texas. He was employed at Cydsa, S.A. from 1979 to 1981 and at Conek, S.A. de C.V. from 1981 to 1985.

He is also an alternate member of the board of directors of GCC. He was also Vice President of the Mexican Employers' Association (Confederación Patronal de la República Mexicana or "COPARMEX"), member of the board and former Chairman of the Private Sector Center for Sustainable Development Studies (Centro de Estudios del Sector Privado para el Desarrollo Sustentable), former Chairman of COPARMEX Nuevo León, he was Chairman and member of the board of directors of Gas Industrial de Monterrey, S.A. de C.V. He also served as Chairman of an advisory board of the School of Engineering and Information Technology of the Instituto Tecnológico y de Estudios Superiores de Monterrey and member of the board of directors of the World Environmental Center. Currently, he is a member of the boards of directors of Hoteles City Express, S.A.P.I. de C.V. and of Innovación y Conveniencia, S.A. de C.V., formerly known as Grupo Chapa, S.A. de C.V. He is also a member of the boards of directors of Universidad de Monterrey, A.C., Unidos para la Conservación, Pronatura Noreste, A.C., and Consejo Consultivo de Flora y Fauna del Estado de Nuevo León. He is also founder and Chairman of the board of directors of Comenzar de Nuevo, A.C. He is a first cousin of Rodolfo García Muriel, a member of CEMEX, S.A.B. de C.V.'s Board of Directors.

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 1985 and was a member of CEMEX, S.A.B. de C.V.'s Finance Committee from 2009 until March 2015. On March 26, 2015, he was appointed as a member of CEMEX, S.A.B. de C.V.'s Corporate Practices and Finance Committee and has been a member since then. On March 31, 2016, he was appointed as a member of CEMEX, S.A.B. de C.V.'s Audit Committee. He is the Chief Executive

Officer of Compañía Industrial de Parras, S.A. de C.V. He is a member of the boards of directors of Inmobiliaria Romacarel, S.A.P.I. de C.V., Comfort Jet, S.A. de C.V., and member of the regional board of Grupo Financiero Banamex. He was a member of CEMEX México's board of directors until February 2017. Mr. García Muriel is also Vice President of the National Chamber of the Textile Industry (*Cámara Nacional de la Industria Textil*). Mr. García Muriel holds a degree in electric mechanical engineering from Universidad Iberoamericana. He is a first cousin of Armando J. García Segovia, a member of CEMEX, S.A.B. de C.V.'s Board of Directors.

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 1987. He was President of CEMEX, S.A.B. de C.V.'s Audit Committee from 2002 to 2006, President of CEMEX, S.A.B. de C.V.'s Corporate Practices and Audit Committee from 2006 to 2009, and President of CEMEX, S.A.B. de C.V.'s new Audit Committee from 2009 until March 2015. On March 26, 2015, he was appointed as a member of CEMEX, S.A.B. de C.V.'s Audit Committee and has been a member since then. He is Chairman of the boards of directors of Desarrollo Integrado, S.A. de C.V., Administración Ficap, S.A. de C.V., Aero Zano, S.A. de C.V., Ciudad Villamonte, S.A. de C.V., Focos, S.A. de C.V., Industrias Diza, S.A. de C.V., Mantenimiento Integrado, S.A. de C.V., and Pilatus PC-12 Center de México, S.A. de C.V. He is a member of the board of directors of S.L.I. de México, S.A. de C.V. He was a member of CEMEX México's board of directors until February 2017. Mr. Zambrano Villarreal is a graduate in mechanical engineering and administration from the Instituto Tecnológico y de Estudios Superiores de Monterrey. He is a second cousin of Rogelio Zambrano Lozano, Chairman of CEMEX, S.A.B. de C.V.'s Board of

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 1995 and President of CEMEX, S.A.B. de C.V.'s Corporate Practices Committee from 2009 until March 2015. On March 26, 2015, he was appointed as a member and President of CEMEX, S.A.B. de C.V.'s Corporate Practices and Finance Committee and has served as its President since then. He is Chairman of the board of directors and Chief Executive Officer of Tenedora TOPAZ, S.A.P.I. de C.V. He was a member of the board of directors of Alfa, S.A.B. de C.V. until March 2013 and Chairman and Chief Executive

Directors.

Officer for 16 years until March 2010. Mr. Garza Medina is currently a member of the boards of directors of ABC Holding, S.A.P.I. de C.V. and Autlán, S.A.B. de C.V. Mr. Garza Medina was a member of the Board of Dean's Advisors of the Harvard Business School and member of the advisory council of Stanford University's School of Engineering. Additionally, Mr. Garza Medina was the Chairman of the board of the Universidad de Monterrey, A.C. for 13 years until April 2012. Mr. Garza Medina holds a bachelor of science and a master's degree in industrial engineering from Stanford University, where he earned the F. Terman Award. He also holds an M.B.A. from Harvard University.

José Manuel Rincón Gallardo Purón (74) .....

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since 2003. On March 26, 2015, he was appointed as President of CEMEX, S.A.B. de C.V.'s Audit Committee, where he qualifies as a "financial expert" for purposes of the Sarbanes-Oxley Act of 2002, and has remained its President since then. He is President of the board of directors of Sonoco de México S.A. de C.V., member of the boards of directors and audit committees of Grupo Financiero Banamex, Grupo Herdez, S.A. de C.V., General de Seguros, S.A.B., Reaseguradora Patriam S,A,B,, Peña Verde, S.A.B., Cinépolis, S.A. de C.V., Citelis, S.A. de C.V., Grupo Proa, S.A. de C.V., Grupo CP, S.A. de C.V., and member of the board of directors of Invekra, S.A.P.I. and Fondo Wamex, S.A. de C.V. Mr. Rincón Gallardo is a member of Instituto Mexicano de Contadores Públicos, A.C., he was a managing partner of KPMG México, and was member of the boards of directors of KPMG United States and KPMG International. He was a member of CEMEX México's board of directors until February 2017. He is also a member of the Corporate Practices Committee of Consejo Coordinador Empresarial. He is a certified public accountant from the Universidad Nacional Autónoma de México.

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors and member of CEMEX, S.A.B. de C.V.'s Finance Committee from February 2012 until March 2015 and a member of CEMEX, S.A.B. de C.V.'s Corporate Practices Committee from March 2013 until March 2015. On March 26, 2015, he was appointed as a member of CEMEX, S.A.B. de C.V.'s Audit Committee and the Corporate Practices and Finance Committee, and has remained in both

committees since then. Mr. Fernández is currently the Chief Executive Officer of Servicios Administrativos Contry, S.A. de C.V., a privately held company that provides central administrative and investment management services. He has served as Chief Executive Officer of the Corporate Development Division at Grupo Financiero BBVA Bancomer, S.A. de C.V., after holding several positions in BBVA Bancomer since 1991. Furthermore, Mr. Fernández is a member of the boards of directors of Alfa, S.A.B. de C.V., Fomento Económico Mexicano, S.A.B. de C.V., and VISA, Inc. He graduated with a degree in electric mechanical engineering from the Instituto Tecnológico y de Estudios Superiores de Monterrey and also holds an M.B.A. from Harvard Business School.

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors and Corporate Practices and Finance Committee since March 26, 2015. Mr. Garza Sada is currently the Chairman of the boards of directors of Alfa, S.A.B. de C.V., Alpek, S.A.B. de C.V. and Nemak, S.A.B. de C.V. and a member of the boards of directors of El Puerto de Liverpool, S.A.B. de C.V., Grupo Lamosa, S.A.B. de C.V., Instituto Tecnológico y de Estudios Superiores de Monterrey, Fomento Económico Mexicano, S.A.B. de C.V., Grupo Financiero Banorte, S.A.B. de C.V., Frisa Industrias, S.A. de C.V., Grupo Proeza, S.A.P.I. de C.V., and the Stanford Graduate School of Business advisory board and Stanford University's board of trustees. Mr. Garza Sada holds a bachelor's degree from the Massachusetts Institute of Technology and an M.B.A. from Stanford University.

David Martínez Guzmán (59) .....

Has been a member of CEMEX, S.A.B. de C.V.'s Board of Directors since March 26, 2015.

Mr. Martínez Guzmán is a Managing Director of Fintech Advisory Inc. In addition, as of December 31, 2016, he was a member of the boards of directors of Alfa, S.A.B. de C.V., Vitro, S.A.B. de C.V., Telecom Argentina and Banco de Sabadell.

Mr. Martínez Guzmán earned degrees in electrical and mechanical engineering from Universidad Nacional Autónoma de México and also holds an M.B.A. from Harvard Business School.

Mr. Elizondo Almaguer has been an independent member of Grupo Financiero Banorte, S.A.B. de C.V.'s board of directors since April 2010, and a member of the boards of directors of Autlán, S.A.B.

de C.V., Rassini, S.A.B. de C.V., Grupo Senda Autotransporte, S.A. de C.V. and Gruma, S.A.B. de C.V. He is also professor of economics and international finance at EGADE Business School, the graduate business school of Instituto Tecnológico y de Estudios Superiores de Monterrey. He was director for economic studies at Alfa, S.A.B. de C.V. and Grupo Financiero BBVA Bancomer, S.A. de C.V. He founded and was director of the Graduate School of Economics of the Universidad Autónoma de Nuevo León. He was deputy governor of the Banco de México from 1998 to 2008. Mr. Elizondo Almaguer is a graduate in economics from the Universidad de Nuevo León and holds a master's degree in economics from the University of Wisconsin-Madison.

#### **Board Practices**

In compliance with the Mexican Securities Market Law (*Ley del Mercado de Valores*), which was enacted on December 28, 2005 and became effective on June 28, 2006 (the "Mexican Securities Market Law"), CEMEX, S.A.B. de C.V.'s shareholders approved, at an extraordinary shareholders' meeting held on April 27, 2006, a proposal to amend various articles of CEMEX, S.A.B. de C.V.'s by-laws (estatutos sociales), in order to improve our standards of corporate governance and transparency, among other matters. The amendments included outlining the fiduciary duties of the members of CEMEX, S.A.B. de C.V.'s board of directors, who are now required:

- to perform their duties in a value-creating manner for the benefit of CEMEX without favoring a specific shareholder or group of shareholders;
- to act diligently and in good faith by adopting informed decisions; and
- to comply with their duty of care and loyalty, abstaining from engaging in illicit acts or activities.

The Mexican Securities Market Law also eliminated the position of statutory examiner, whose duties of surveillance are now the responsibility of the board of directors, fulfilled through the corporate practices and finance committee the audit committees, as well as through the external auditor who audits the entity's financial statements, each within its professional role. With its surveillance duties, CEMEX, S.A.B. de C.V.'s board of directors is no longer in charge of managing CEMEX; instead, this is the responsibility of CEMEX, S.A.B. de C.V.'s chief executive officer.

Pursuant to the Mexican Securities Market Law and CEMEX, S.A.B. de C.V.'s by-laws, at least 25% of its directors must qualify as independent directors.

CEMEX, S.A.B. de C.V. has not entered into any service contracts with its directors that provide for benefits upon termination of employment.

# The Audit Committee, the Corporate Practices and Finance Committee and Other Committees

The Mexican Securities Market Law required CEMEX, S.A.B. de C.V. to create a corporate practices committee comprised entirely of independent directors, in addition to its then existing audit committee. In compliance with such requirement, in 2006 CEMEX, S.A.B. de C.V. increased the responsibilities of its audit committee and changed its name to "corporate practices and audit committee." To further enhance the

effectiveness of its corporate governance, at CEMEX, S.A.B. de C.V.'s annual general ordinary shareholders' meeting held on April 23, 2009, CEMEX, S.A.B. de C.V.'s shareholders approved the division of this committee into two committees with different members and responsibilities, the audit committee and the corporate practices committee. In addition, at the annual general ordinary shareholders' meeting held on April 29, 2010, CEMEX, S.A.B. de C.V.'s shareholders approved the creation of the finance committee. In addition, at the annual general ordinary shareholders' meeting held on March 26, 2015, CEMEX, S.A.B. de C.V.'s shareholders approved that the then existing corporate practices committee took over certain responsibilities of the then existing finance committee and changed its name to "corporate practices and finance committee."

# CEMEX, S.A.B. de C.V.'s audit committee is responsible for:

- evaluating our internal controls and procedures, and identifying deficiencies;
- following up with corrective and preventive measures in response to any non-compliance with our operation and accounting guidelines and policies;
- evaluating the performance of our external auditors;
- describing and valuing non-audit services performed by our external auditor;
- reviewing CEMEX, S.A.B. de C.V.'s financial statements;
- assessing the effects of any modifications to the accounting policies approved during any fiscal year;
- overseeing measures adopted as a result of any observations made by CEMEX, S.A.B. de C.V.'s
  shareholders, directors, executive officers, employees or any third parties with respect to accounting,
  internal controls and internal and external audit, as well as any complaints regarding management
  irregularities, including anonymous and confidential methods for addressing concerns raised by
  employees; and
- analyzing the risks identified by CEMEX, S.A.B. de C.V.'s independent auditors, accounting, internal control and process assessment areas.

# CEMEX, S.A.B. de C.V.'s corporate practices committee and finance committee is responsible for:

- evaluating the hiring, firing and compensation of CEMEX, S.A.B. de C.V.'s chief executive officer;
- reviewing the hiring and compensation policies for CEMEX, S.A.B. de C.V.'s executive officers;
- reviewing related party transactions;
- reviewing policies regarding use of corporate assets;
- · reviewing unusual or material transactions;
- evaluating waivers granted to our directors or executive officers regarding seizure of corporate opportunities; and
- identifying, evaluating and following up on the operating risks affecting the company and its subsidiaries.
- evaluating the company's financial plans
- · reviewing the company's financial strategy and its implementation; and
- evaluating mergers, acquisitions, review of market information and financial plans, including financing and related transactions.

Under CEMEX, S.A.B. de C.V.'s by-laws and the Mexican Securities Market Law, all members of the corporate practices and finance committee and the audit committee, including their presidents, are required to be independent directors. The president of the audit committee and the corporate practices and finance committee shall be appointed and removed from his or her position only by the general shareholders meeting, and the rest of the members may only be removed by a resolution of the general shareholders or of the board of directors.

Set forth below are the names of the members of CEMEX, S.A.B. de C.V.'s current audit committee and corporate practices and finance committee. Each member of the committees is an independent director. The terms of the members of the committees are indefinite. José Manuel Rincón Gallardo qualifies as an "audit committee financial expert" for purposes of the Sarbanes Oxley Act of 2002. See "Item 16A—Audit Committee Financial Expert."

#### **AUDIT COMMITTEE:**

José Manuel Rincón Gallardo Purón Roberto Luis Zambrano Villarreal

Rodolfo García Muriel

Francisco Javier Fernández Carbajal

### CORPORATE PRACTICES AND FINANCE COMMITTEE:

Dionisio Garza Medina Francisco Javier Fernández Carbajal Rodolfo García Muriel Armando Garza Sada President

President

In addition, at a meeting of CEMEX, S.A.B. de C.V.'s Board of Directors held on September 25, 2014, CEMEX, S.A.B. de C.V.'s directors approved the creation of a sustainability committee.

CEMEX, S.A.B. de C.V.'s sustainability committee is responsible for:

- ensuring sustainable development in CEMEX's strategy;
- supporting CEMEX, S.A.B. de C.V.'s Board of Directors in fulfilling its responsibility to shareholders regarding sustainable growth;
- evaluating the effectiveness of sustainability programs and initiatives;
- proving assistance to CEMEX's Chief Executive Officer and senior management team regarding the strategic direction on sustainability; and
- endorsing a model of sustainability, priorities and key indicators.

The current members of CEMEX, S.A.B. de C.V.'s sustainability committee are:

Armando J. García Segovia Ian Christian Armstrong Zambrano Roberto Luis Zambrano Villarreal President

# Compensation of CEMEX, S.A.B. de C.V.'s Directors and Members of Our Senior Management

For the year ended December 31, 2016, the aggregate amount of compensation we paid, or our subsidiaries paid, to all members of our Board of Directors, alternate members of our Board of Directors and senior managers, as a group, was approximately U.S.\$43 million. Approximately U.S.\$32 million of this amount was paid as base compensation, including approximately U.S.\$8 million of a bonus pool to key executives based on our operating performance and U.S.\$12 million to provide pension, retirement or similar benefits. In addition, approximately U.S.\$11 million of the aggregate amount corresponds to stock-based compensation, including approximately U.S.\$7 million related to the bonus pool to key executives based on our operating performance. During 2016, we issued approximately 54 million CPOs to this group pursuant to the Restricted Stock Incentive Plan ("RSIP") described below under "—Restricted Stock Incentive Plan (RSIP)."

# CEMEX, Inc. ESOP

As a result of the acquisition of CEMEX, Inc. (formerly Southdown, Inc.) in November 2000, we established a stock option program (the "ESOP") for CEMEX, Inc.'s executives to purchase CEMEX, S.A.B. de

C.V.'s ADSs. The options granted under the program had a fixed exercise price in U.S. Dollars equivalent to the average market price of one ADS during a six-month period before the grant date and had a ten-year term. 25% of the options vested annually during the first four years after their grant date. The options were covered using shares owned by our subsidiaries, thus potentially increasing stockholders' equity and the number of shares outstanding. As of December 31, 2016, these options expired without being exercised.

# Consolidated Employee Stock Option Information

Stock options activity during 2015 and 2016, the balance of options outstanding as of December 31, 2015 and 2016 and other general information regarding our stock option programs, is presented in notes 2Q and 21 to our 2016 audited consolidated financial statements included elsewhere in this annual report.

As of December 31, 2016, no employee stock options to purchase our securities were outstanding. The options granted under the ESOP that were outstanding as of December 31, 2014 expired without being exercised.

#### Restricted Stock Incentive Plan (RSIP)

Since January 2005, we have been changing our long-term variable compensation programs from stock option grants to restricted stock awards under a RSIP. Under the terms of the RSIP, eligible employees are allocated a specific number of restricted CPOs as variable compensation to be vested over a four-year period. Before 2006, we distributed annually to a trust an amount in cash sufficient to purchase in the market, on behalf of each eligible employee, 25% of such employee's allocated number of CPOs. During 2006, in order to reduce the volatility of our RSIP, we began to distribute annually an amount in cash sufficient to purchase 100% of the allocated CPOs for each eligible employee. Although the vesting period of the restricted CPOs and other features of the RSIP did not change as a result of this new policy, the nominal amount of annual compensation received by eligible employees increased in proportion to the additional number of CPOs received as a result of the new policy. The CPOs purchased by the trust was held in a restricted account by the trust on behalf of each employee for four years. At the end of each year during such four-year period, the restrictions lapsed with respect to 25% of the allocated CPOs and such CPOs became freely transferable and subject to withdrawal from the trust.

Starting in 2009, we made additional changes to the mechanism for granting the RSIP, but the benefits remained the same as in previous years. First, CPOs are no longer purchased in the open market, but instead CEMEX, S.A.B. de C.V. issues new CPOs to cover the RSIP. Second, CEMEX, S.A.B. de C.V. now issues the RSIP in four blocks of 25% per year. The total number of CEMEX, S.A.B. de C.V. CPOs granted during 2016 were approximately 70 million, of which approximately 15.7 million were related to senior management and the board of directors. In 2016, approximately 54.8 million CPOs were issued, representing the first 25% of the 2016 program, the second 25% of the 2015 program, the third 25% of the 2014 program and the final 25% of the 2013 program. Of these 54 million CPOs, approximately 12.9 million corresponded to senior management and the board of directors.

See note 25 to our consolidated financial statements included elsewhere in this annual report.

# CEMEX Latam Employee stock-ownership plan

To better align CEMEX Latam's executives' interests with those of its stockholders, on January 16, 2013, CEMEX Latam's board of directors approved, effective as of January 1, 2013, a long-term incentives plan available to eligible executives of CEMEX Latam, which consists of an annual compensation plan based on CEMEX Latam shares. The underlying shares in this long-term incentives plan, which are held in the CEMEX Latam's treasury, and subject to certain restrictions, are delivered fully vested under each annual program over a service period of four years. During 2015, CEMEX Latam delivered 242,618 shares to eligible executives under this long-term incentives plan. During 2016, CEMEX Latam delivered 271,461 shares to eligible executives under this long-term incentives plan. The delivery of these shares is dilutive to CEMEX's equity indirect interest in CEMEX Latam.

### **Employees**

As of December 31, 2016, we had 41,853 employees worldwide, which represented a decrease of approximately 2.93% from the total number of employees we had as of December 31, 2015.

The following table sets forth the number of our full-time employees and a breakdown of their geographic location as of December 31, 2014, 2015 and 2016:

Location	2014	2015	2016
Mexico	11,412	11,050	11,249
United States	9,808	10,236	9,830
Europe			
United Kingdom	2,941	2,977	2,922
Germany	2,391	1,448	1,473
France	1,875	1,844	1,833
Spain	1,670	1,890	1,722
Rest of Europe	3,326	3,098	3,172
South, Central America and the Caribbean			
Colombia	3,132	3,131	3,048
Rest of South, Central America and the			
Caribbean	4,297	3,931	3,351
Asia, Middle East and Africa			
Egypt	650	670	679
Philippines	665	693	710
Rest of Asia, Middle East and Africa	2,074	2,149	1,864

In Mexico, we have entered into collective bargaining agreements on a plant-by-plant basis, and such collective bargaining agreements are renewable on an annual basis with respect to salaries and on a biannual basis with respect to benefits. During 2016, we renewed more than 106 contracts with different labor unions in Mexico.

As of December 31, 2016, approximately 26% of our employees in the United States were represented by unions, with the largest number being members of the International Brotherhood of Teamsters, the Laborers' Union of North America, the International Brotherhood of Boilermakers and the International Union of Operating Engineers. We have entered into or are in the process of negotiating various collective bargaining agreements at many of our U.S. plants, which collective bargaining agreements have various expiration dates through December 15, 2022.

In Spain, as of December 31, 2016, (i) some of our employees in the cement business had a company-specific collective bargaining agreement that is renewable every two to three years on a legal entity and business basis, and (ii) some of our employees in the ready-mix concrete, mortar, aggregates and transport sectors had industry-specific collective bargaining agreements.

In the United Kingdom, as of December 31, 2016, our cement manufacturing and cement logistics operations had collective bargaining agreements with Unite the Union. The rest of our operations in the United Kingdom are not part of collective bargaining agreements; however, there are local agreements for consultations and employees can be represented by a trade union official or body of which they are an existing member.

In Germany, as of December 31, 2016, most of our employees worked under collective bargaining agreements with the Industriegewerkschaft Bauen Agrar Umwelt—IG B.A.U. union. In addition there are internal company agreements, negotiated between the workers council and the company itself.

In France, as of December 31, 2016, less than 5% of our employees were members of one of the five main unions. At least one representative from one of the five main unions was represented in the following legal entities: Cemex Granulats (two representatives), Cemex Bétons Nord Ouest (one representative), Cemex Bétons

Ile de France (three representatives), Cemex Bétons Sud Est (one representative) and Cemex Granulats Rhône Méditérranée (two representatives). All agreements are negotiated with unions and non-union representatives elected in the local workers council (Comité d'Entreprise) for periods of four years. The last elections took place in April 2014 and the next election will take place in April 2018, except for Cemex Bétons Ile de France, whose last election took place in early 2015 and the next one will be in 2019.

In Egypt, as of December 31, 2016, approximately 100% of our employees in ACC were affiliated to ACC's union ("ACC's Union"), which is a member of Egypt's General Union of Building Materials. ACC's Union represents these employees in any collective negotiation, agreement or dispute.

In Israel, as of December 31, 2016, approximately 89% of our employees in Lime & Stone Production Company Ltd., one of our operating subsidiaries in Israel, or 24% of all of our employees in Israel, were represented by Histadrut, Israel's largest labor union. These employees work under special collective bargaining agreements which are renewable on an annual basis with respect to salaries and benefits and every one or two years with respect to retirement and dismissal terms.

In the Philippines, as of December 31, 2016, approximately 33% of the cement operation employees of APO and Solid Cement were members of either one of four labor unions that are affiliated with a national federation. Each labor union has a collective bargaining agreement with either APO or Solid Cement. Each of the collective bargaining agreements has a term of five years, with the economic terms negotiated in the third and fifth years. We consider our relationships with the labor unions representing our employees in the Philippines to be satisfactory.

In Colombia, as of December 31, 2016, there were five regional sectionals of a single union that represents our employees at the Caracolito, Clemencia, Bucaramanga, Cúcuta and Maceo cement plants and mills, and part of the logistic operations at the national level. There were also collective agreements with non-union workers at the Santa Rosa cement plant, all aggregates operations and the majority of the logistics and ready mix operations in Colombia. Two other unions represent minority groups of employees of our logistics and ready-mix operations. We consider our relationships with labor unions representing our employees in Colombia to be satisfactory.

In Panama, as of December 31, 2016, approximately 62% of our workforce were members of a union named Sindicato de Trabajadores de Cemento Bayano, which is a legal entity registered before the Panamanian Ministry of Labor. The union's board of directors is elected every two to four years through a general voting process. The collective bargaining agreement that is currently in full force and effect was entered into in January 2016 and expires in December 2019.

# **Share Ownership**

As of December 31, 2016, our senior management and directors and their immediate families owned, collectively, approximately 1.73% of CEMEX, S.A.B. de C.V.'s outstanding shares, including shares underlying stock options and restricted CPOs under our ESOPs. This percentage does not include shares held by the extended families of members of our senior management and directors, since, to the best of our knowledge, no voting arrangements or other agreements exist with respect to those shares. As of December 31, 2016, no individual director or member of our senior management beneficially owned one percent or more of any class of CEMEX, S.A.B. de C.V.'s outstanding capital stock and each such individual's share ownership has not been previously disclosed to shareholders or otherwise made public.

#### Item 7—Major Shareholders and Related Party Transactions

#### **Major Shareholders**

The information contained in Amendment No. 5 to a statement on Schedule 13G filed with the SEC on January 23, 2017, stated that as of December 31, 2016, BlackRock beneficially owned 1,033,221,731 CPOs,

representing 7.4% of CEMEX, S.A.B. de C.V.'s outstanding capital stock. BlackRock does not have voting rights different from our other non-Mexican holders of CPOs. As required by CEMEX, S.A.B. de C.V.'s by-laws, CEMEX, S.A.B. de C.V.'s board of directors is required to approve BlackRock beneficial ownership of CEMEX, S.A.B. de C.V.'s outstanding capital stock. Pursuant to the authorizations by Board of Directors, BlackRock is authorized to acquire up to 13% of capital stock.

As of the date of this annual report, Dodge & Cox, an investment adviser registered under the U.S. Investment Advisers Act of 1940, as amended, has been authorized by CEMEX, S.A.B. de C.V.'s board of directors to own up to 6% of CEMEX, S.A.B. de C.V.'s outstanding capital stock. Dodge & Cox does not have voting rights different from our other non-Mexican holders of CPOs.

As of March 30, 2017, CEMEX, S.A.B. de C.V.'s outstanding capital stock consisted of 28,121,583,148 Series A shares and 14,060,791,574 Series B shares, in each case including shares held by our subsidiaries. Additionally, at CEMEX, S.A.B. de C.V.'s 2016 annual general ordinary shareholders' meeting held on March 30, 2017, CEMEX, S.A.B. de C.V.'s shareholders approved the issuance of 1,124,863,326 Series A shares and 562,431,663 Series B shares, equivalent to approximately 562.4 million CPOs, to be allocated to shareholders on a pro rata basis pursuant to such approval. These shares are expected to become part of CEMEX, S.A.B. de C.V.'s outstanding capital stock on May 8, 2017.

As of March 31, 2017, a total of 28,078,596,254 Series A shares and 14,039,298,127 Series B shares outstanding were held by the CPO trust. Each CPO represents two Series A shares and one Series B share. A portion of the CPOs is represented by ADSs. Under the terms of the CPO trust agreement, non-Mexican holders of CPOs and ADSs have no voting rights with respect to the Series A shares underlying those CPOs and ADSs. All ADSs are deemed to be held by non-Mexican nationals. At every shareholders' meeting, the Series A shares held in the CPO trust are voted as expressed by the shareholders representing the majority of the capital stock entitled to vote.

Other than BlackRock and the CPO trust, we are not aware of any person that is the beneficial owner of five percent or more of any class of CEMEX, S.A.B. de C.V.'s voting securities.

As of March 31, 2017, through CEMEX, S.A.B. de C.V.'s subsidiaries, we owned approximately 19.7 million CPOs, representing approximately 0.1% of CEMEX, S.A.B. de C.V.'s outstanding CPOs and approximately 0.1% of CEMEX, S.A.B. de C.V.'s outstanding voting stock. These CPOs are voted at the direction of our management. CEMEX, S.A.B. de C.V.'s voting rights over those CPOs are the same as those of any other CPO holder. As of the same date, we did not hold any CPOs in derivative instruments hedging expected cash flows of stock options exercises.

CEMEX, S.A.B. de C.V.'s by-laws provide that its board of directors must authorize in advance any transfer of voting shares of its capital stock that would result in any person's, or group's acting in concert, becoming a holder of 2% or more of CEMEX, S.A.B. de C.V.'s voting shares.

Mexican securities regulations provide that our majority-owned subsidiaries may neither directly or indirectly invest in CEMEX, S.A.B. de C.V.'s CPOs nor other securities representing CEMEX, S.A.B. de C.V.'s capital stock. The Mexican securities authority could require any disposition of the CPOs or of other securities representing our capital stock so owned and/or impose fines on us if it were to determine that the ownership of CEMEX, S.A.B. de C.V.'s CPOs or of other securities representing CEMEX, S.A.B. de C.V.'s capital stock by CEMEX, S.A.B. de C.V.'s subsidiaries, in most cases, negatively affects the interests of CEMEX, S.A.B. de C.V.'s shareholders. Notwithstanding the foregoing, the exercise of all rights pertaining to CEMEX, S.A.B. de C.V.'s CPOs or to other securities representing our capital stock in accordance with the instructions of CEMEX, S.A.B. de C.V.'s subsidiaries. The holders of these CPOs or of other securities representing CEMEX, S.A.B. de C.V.'s capital stock are entitled to exercise the same rights relating to their CPOs or their other securities representing CEMEX, S.A.B. de C.V.'s capital stock including all voting rights, as any other holder of the same series.

As of March 31, 2017, we had 641 ADS holders of record, holding 648,417,085 ADRs, representing 6,484,170,850 CPOs, or approximately 46.12% of CEMEX, S.A.B. de C.V.'s outstanding capital stock as of such date.

## **Related Party Transactions**

We had no significant related party transactions for the year ended December 31, 2016. From January 1, 2016 through the date of this annual report, we did not have any outstanding loans to any of CEMEX, S.A.B. de C.V.'s directors or members of senior management.

## **Item 8—Financial Information**

### **Consolidated Financial Statements and Other Financial Information**

See "Item 18—Financial Statements" and "Index to Consolidated Financial Statements."

## **Legal Proceedings**

See "Item 4—Information on the Company—Regulatory Matters and Legal Proceedings."

### **Dividends**

A declaration of any dividend can be made by CEMEX, S.A.B. de C.V.'s shareholders at any general ordinary shareholders' meeting. Any dividend declaration is usually based upon the recommendation of CEMEX, S.A.B. de C.V.'s board of directors. However, CEMEX, S.A.B. de C.V.'s shareholders are not obligated to approve the board's recommendation. CEMEX, S.A.B. de C.V. may only pay dividends from retained earnings included in financial statements that have been approved by CEMEX, S.A.B. de C.V.'s shareholders and after all losses have been paid for, a legal reserve equal to 5% of its paid-in capital has been created and CEMEX, S.A.B. de C.V.'s shareholders have approved the relevant dividend payment. See "Item 10—Additional Information—Taxation—Mexican Tax Considerations." Since CEMEX, S.A.B. de C.V. conducts its operations through its subsidiaries; it has no significant assets of its own except for its investments in those subsidiaries. Consequently, CEMEX, S.A.B. de C.V.'s ability to pay dividends to its shareholders is dependent upon its ability to receive funds from its subsidiaries in the form of dividends, management fees, or otherwise. The Credit Agreement and the indentures governing the Senior Secured Notes effectively prohibit CEMEX, S.A.B. de C.V. from declaring and paying cash dividends or making other cash distributions to its shareholders. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—CEMEX, S.A.B. de C.V.'s ability to repay debt and pay dividends depends on our subsidiaries' ability to transfer income and dividends to us."

The recommendation of CEMEX, S.A.B. de C.V.'s board of directors as to whether to pay and the amount of any annual dividends has been and will continue to be, in absence of contractual restrictions to pay or declare dividends, based upon, among other things, earnings, cash flow, capital requirements, contractual restrictions, and our financial condition and other relevant factors.

Owners of ADSs on the applicable record date will be entitled to receive any dividends payable in respect of the Series A shares and the Series B shares underlying the CPOs represented by those ADSs; however, as permitted by the deposit agreement pursuant to which CEMEX, S.A.B. de C.V.'s ADSs are issued, CEMEX, S.A.B. de C.V. may instruct the ADS depositary not to extend the option to elect to receive cash in lieu of the stock dividend to the holders of ADSs. The ADS depositary will fix a record date for the holders of ADSs in respect of each dividend distribution. Unless otherwise stated, the ADS depositary has agreed to convert cash dividends received by it in respect of the Series A shares and the Series B shares underlying the CPOs represented by ADSs from Mexican Pesos into U.S. Dollars and, after deduction or after payment of expenses of the ADS depositary, to pay those dividends to holders of ADSs in U.S. Dollars. CEMEX, S.A.B. de C.V. cannot assure holders of its ADSs that the ADS depositary will be able to convert dividends received in Mexican Pesos into U.S. Dollars.

## **Significant Changes**

Except as described herein, no significant change has occurred since the date of our 2016 consolidated financial statements included elsewhere in this annual report.

# Item 9—Offer and Listing

#### **Market Price Information**

CEMEX, S.A.B. de C.V.'s CPOs are listed on the Mexican Stock Exchange and trade under the symbol "CEMEX.CPO." CEMEX, S.A.B. de C.V.'s ADSs, each of which currently represents ten CPOs, are listed on the New York Stock Exchange ("NYSE") and trade under the symbol "CX." The following table sets forth, for the periods indicated, the reported highest and lowest market quotations in nominal Mexican Pesos for CPOs on the Mexican Stock Exchange and the high and low sales prices in U.S. Dollars for ADSs on the NYSE.

		CPOs(1)		ADSs	
Calendar Period	High	Low	High	Low	
Yearly					
2012	12.93	7.00	10.14	4.94	
2013	16.16	12.58	12.71	9.14	
2014	18.50	14.32	14.36	9.66	
2015	16.37	8.64	10.72	4.95	
2016	18.07	7.09	9.15	3.82	
Quarterly					
2015					
First quarter	15.60	12.97	10.45	8.72	
Second quarter	16.37	14.11	10.72	9.02	
Third quarter	14.75	10.60	9.24	6.12	
Fourth quarter	13.31	8.64	8.14	4.95	
2016					
First quarter	12.70	6.78	7.43	3.63	
Second quarter	12.80	10.61	7.45	5.49	
Third quarter	16.05	10.93	8.89	5.81	
Fourth quarter	18.07	15.30	9.15	7.43	
2017					
First quarter	19.66	16.46	9.49	7.80	
Monthly					
2016-2017					
October	16.94	15.30	9.15	7.90	
November	16.74	15.41	8.99	7.43	
December	18.07	15.90	8.93	7.74	
January	19.88	16.46	9.49	7.80	
February	18.92	16.93	9.26	8.46	
March	18.06	16.56	9.14	8.54	
April(2)	17.95	16.34	9.62	8.65	

Source: Based on data of the Mexican Stock Exchange and the NYSE.

<sup>(1)</sup> As of December 31, 2016, approximately 99.84% of CEMEX, S.A.B. de C.V.'s outstanding share capital was represented by CPOs.

<sup>(2)</sup> CPO and ADS prices are through April 21, 2017.

On April 21, 2017, the last reported closing price for CPOs on the Mexican Stock Exchange was Ps16.66 per CPO, and the last reported closing price for ADSs on the NYSE was U.S.\$8.78 per ADS.

During 2016, (i) we did not have a market maker and (ii) there was no suspension of trading of (a) CEMEX, S.A.B. de C.V.'s CPOs on the Mexican Stock Exchange or (b) CEMEX, S.A.B. de C.V.'s ADSs on the New York Stock Exchange.

## **Item 10—Additional Information**

# Articles of Association and By-laws

#### General

Pursuant to the requirements of Mexican corporations law, CEMEX, S.A.B. de C.V.'s articles of association and by-laws (estatutos sociales), have been registered with the Mercantile Section of the Public Registry of Property and Commerce in Monterrey, Nuevo León, Mexico, under entry number 21, since June 11, 1920.

CEMEX, S.A.B. de C.V. is an operating and holding company engaged directly or indirectly, through its operating subsidiaries, primarily in the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates, clinker and other construction materials throughout the world. CEMEX, S.A.B. de C.V.'s corporate purpose can be found in article 2 of CEMEX, S.A.B. de C.V.'s by-laws.

CEMEX, S.A.B. de C.V. has two series of common stock, the Series A common stock, with no par value ("Series A shares"), which can only be owned by Mexican nationals, and the Series B common stock, with no par value ("Series B shares"), which can be owned by both Mexican and non-Mexican nationals. CEMEX, S.A.B. de C.V.'s by-laws state that the Series A shares may not be held by non-Mexican individuals, corporations, groups, units, trusts, associations or governments that are foreign or have participation by foreign governments or their agencies. CEMEX, S.A.B. de C.V.'s by-laws also state that the Series A shares shall at all times account for a minimum of 64% of CEMEX, S.A.B. de C.V.'s total outstanding voting stock and that the Series B shares shall at all times account for a minimum of 36% of CEMEX, S.A.B. de C.V.'s total outstanding voting stock. Other than as described herein, holders of the Series A shares and the Series B shares have the same rights and obligations.

In 1994, CEMEX, S.A.B. de C.V. changed from a fixed capital corporation to a variable capital corporation in accordance with Mexican corporation law. As a result, CEMEX, S.A.B. de C.V. established a fixed capital account and a variable capital account and issued one share of variable capital stock of the same series for each eight shares of fixed capital stock held by any shareholder. Each of our fixed and variable capital accounts is comprised of Series A shares and Series B shares. Under the Mexican Securities Market Law and CEMEX, S.A.B. de C.V.'s by-laws, holders of shares representing variable capital are not entitled to withdraw those shares.

Shareholder authorization is required to increase or decrease either the fixed capital account or the variable capital account. Shareholder authorization to increase or decrease the fixed capital account must be obtained at an extraordinary meeting of shareholders. Shareholder authorization to increase or decrease the variable capital account must be obtained at an ordinary general meeting of shareholders.

On April 29, 1999, CEMEX, S.A.B. de C.V.'s shareholders approved a stock split, and for every one of CEMEX, S.A.B. de C.V.'s shares of any series CEMEX, S.A.B. de C.V. issued two Series A shares and one Series B share. Concurrently with this stock split, CEMEX, S.A.B. de C.V. also consummated an exchange offer to exchange new CPOs and new ADSs representing the new CPOs for CEMEX, S.A.B. de C.V.'s then existing Series A shares, Series B shares and ADSs, and converted CEMEX, S.A.B. de C.V.'s then existing CPOs into the new CPOs.

On June 1, 2001, the then-effective Mexican securities market law was amended, among other, to increase the protection granted to minority shareholders of Mexican listed companies and to commence bringing corporate governance procedures of Mexican listed companies in line with international standards.

On February 6, 2002, the Mexican securities authority (*Comisión Nacional Bancaria y de Valores*) issued an official communication authorizing the amendment of CEMEX, S.A.B. de C.V.'s by-laws to incorporate additional provisions to comply with the then new provisions of the then-effective Mexican securities market law. Following approval from CEMEX, S.A.B. de C.V.'s shareholders at the 2002 annual shareholders' meeting, CEMEX, S.A.B. de C.V. amended and restated its by-laws to incorporate these additional provisions, which consisted of, among other things, protective measures to prevent share acquisitions, hostile takeovers, and direct or indirect changes of control.

On March 19, 2003, the Mexican securities authority issued new regulations designed to (i) further implement minority rights granted to shareholders by the then-effective Mexican securities market law and (ii) simplify and consolidate in a single document provisions relating to securities offerings and periodic reports by Mexican-listed companies.

On April 24, 2003, CEMEX, S.A.B. de C.V.'s shareholders approved changes to its by-laws, incorporating additional provisions and removing some restrictions. The changes that are still in force are as follows:

- The limitation on CEMEX, S.A.B. de C.V.'s variable capital was removed. Formerly, CEMEX, S.A.B. de C.V.'s variable capital was limited to ten times CEMEX, S.A.B. de C.V.'s minimum fixed capital.
- Increases and decreases in CEMEX, S.A.B. de C.V.'s variable capital now require the notarization of
  the minutes of the ordinary general shareholders' meeting that authorize such increase or decrease, as
  well as the filing of these minutes with the Mexican National Securities Registry (Registro Nacional de
  Valores), except when such increase or decrease results from (i) shareholders exercising their
  redemption rights or (ii) stock repurchases.
- The cancellation of registration of our shares in the Securities Section of the Mexican National Securities Registry now involves an amended procedure, which is described below under "— Repurchase Obligation." In addition, any amendments to the article containing these provisions no longer require the consent of the Mexican securities authority and 95% approval by shareholders entitled to vote.

On December 30, 2005, the Mexican Securities Market Law was published to continue bringing corporate governance requirements of Mexican listed companies in line with international standards. This new law included provisions increasing disclosure information requirements, improving minority shareholder rights, and strengthening corporate governance standards including the introduction of new requirements and fiduciary duties (duties of care and loyalty), applicable to each director, officer, external auditor and major shareholder of publicly traded companies. The law also provided that each member of the audit committee must be an independent director, and required the creation of corporate governance committees integrated by independent directors as well. In addition, the law clarified directors' duties, specified safe harbors for directors' actions, clarified what is deemed as a conflict of interest and clarified what are the confidentiality obligations for directors.

Under the then new Mexican Securities Market Law, CEMEX, S.A.B. de C.V. was required to adopt specific amendments to its by-laws within 180 days of the effective date of the new law. Following approval from CEMEX, S.A.B. de C.V.'s shareholders at its extraordinary shareholders' meeting held on April 27, 2006, CEMEX, S.A.B. de C.V. amended and restated its by-laws to incorporate these amendments. The amendments to CEMEX, S.A.B. de C.V.'s by-laws became effective on July 3, 2006. The most significant of these amendments were as follows:

• The change of its corporate name from CEMEX, S.A. de C.V. to CEMEX, S.A.B. de C.V., which means that it is now called a publicly traded company (sociedad anónima bursátil or S.A.B.).

- The creation of a corporate practices committee, which was a new committee of CEMEX, S.A.B. de C.V.'s board of directors and which is comprised exclusively of independent directors.
- The elimination of the position of statutory examiner (comisario) and the assumption of its responsibilities by the board of directors through the audit committee and the then new corporate practices committee, as well as through the external auditor who audits CEMEX, S.A.B. de C.V.'s financial statements, each within its professional role.
- The express attribution of certain duties (such as the duty of loyalty and the duty of care) and liabilities on members of the board of directors as well as on certain senior executive officers.
- The implementation of a mechanism for claims of a breach of a director's or officer's duties, to be brought by us or by holders of 5% or more of CEMEX, S.A.B. de C.V.'s shares.
- The chief executive officer is now the person in charge of managing the company; previously, this was the duty of the board of directors. The board of directors now supervises the chief executive officer.
- Shareholders are given the right to enter into certain agreements with other shareholders.

On March 20, 2014, CEMEX, S.A.B. de C.V. held an extraordinary shareholders' meeting, at which its shareholders approved, among other items, the board of directors' proposal to expand the corporate purpose of CEMEX, S.A.B. de C.V. so that, aside from being a holding company, CEMEX, S.A.B. de C.V. can undertake operating activities related to the production and commercialization of cement, ready-mix concrete and aggregates.

On March 26, 2015, CEMEX, S.A.B. de C.V. held an extraordinary shareholders' meeting, at which its shareholders approved, among other items, (i) changes to CEMEX, S.A.B. de C.V.'s by-laws, incorporating additional provisions and removing some restrictions. The changes, among other items, are the following: extend CEMEX, S.A.B. de C.V.'s corporate existence for an indefinite period of time, adopt the electronic system established by the Ministry of Economy (Secretaría de Economía) for the publication of notices and other legal matters; remove a redundancy in minority rights; adopt additional considerations that CEMEX, S.A.B. de C.V.'s board of directors shall consider in order to authorize purchases of 2% or more of shares; adopt provisions to improve corporate governance with respect to the presidency at shareholders' meetings and corporate bodies; separation of roles of chairman of the board and chief executive officer; include the possibility of electing an alternate secretary of the board of directors; authorization to formalize CEMEX, S.A.B. de C.V.'s restated by-laws and authorization to exchange the share certificates that represent CEMEX, S.A.B. de C.V.'s then outstanding capital stock.

## Changes in Capital Stock and Preemptive Rights

Subject to certain exceptions referred below, CEMEX, S.A.B. de C.V.'s by-laws allow for a decrease or increase in its capital stock if it is approved by its shareholders at a shareholders' meeting. Additional shares of CEMEX, S.A.B. de C.V.'s capital stock, having no voting rights or limited voting rights, are authorized by its by-laws and may be issued upon the approval of its shareholders at a shareholders' meeting, with the prior approval of the Mexican securities authority.

CEMEX, S.A.B. de C.V.'s by-laws provide that, subject to certain exceptions, shareholders have preemptive rights with respect to the class and in proportion to the number of shares of our capital stock they hold, in connection with any capital increase in the number of outstanding Series A shares, Series B shares, or any other existing series of shares, as the case may be. Subject to certain requirements: (i) under article 53 of the Mexican Securities Market Law, this preemptive right to subscribe is not applicable to increases of CEMEX, S.A.B. de C.V.'s capital through public offers; and (ii) under article 210 bis of the General Law of Negotiable Instruments and Credit Operations (*Ley General de Títulos y Operaciones de Crédito*), this preemptive right to subscribe is not applicable when issuing shares under convertible notes. Preemptive rights give shareholders the right, upon

any issuance of shares by us, to purchase a sufficient number of shares to maintain their existing ownership percentages. Preemptive rights must be exercised within the period and under the conditions established for that purpose by the shareholders, and CEMEX, S.A.B. de C.V.'s by-laws and applicable law provide that this period must be 15 days following the publication of the notice of the capital increase through the electronic system established by the Ministry of Economy (Secretaría de Economía) or, in its absence, in the Official Gazette of the State of Nuevo León (*Periódico Oficial del Estado de Nuevo León*) or in any major newspaper published and distributed in the city of Monterrey, Nuevo León, México.

Holders of ADSs that are U.S. persons or are located in the United States may be restricted in their ability to participate in the exercise of such pre-emptive rights. See "Item 3—Key Information—Risk Factors—Risks Relating to Our Business—Preemptive rights may be unavailable to ADS holders."

Pursuant to CEMEX, S.A.B. de C.V.'s by-laws, significant acquisitions of shares of CEMEX, S.A.B. de C.V.'s capital stock and changes of control of CEMEX, S.A.B. de C.V. require prior approval from CEMEX, S.A.B. de C.V.'s board of directors. CEMEX, S.A.B. de C.V.'s board of directors must authorize in advance any transfer of, or creation of any encumbrance or lien on, voting shares of CEMEX, S.A.B. de C.V.'s capital stock that would result in any person or group becoming a holder of 2% or more of CEMEX, S.A.B. de C.V.'s shares. CEMEX, S.A.B. de C.V.'s board of directors shall consider the following when determining whether to authorize such transfer of voting shares: a) the type of investors involved; b) if stock prices may be affected or if the number of CEMEX, S.A.B. de C.V.'s shares outstanding would be reduced in such way that marketability may be affected; c) whether the acquisition would result in the potential acquirer exercising a significant influence or being able to obtain control; d) whether all applicable rules and CEMEX, S.A.B. de C.V.'s by-laws have been observed by the potential acquirer; e) whether the potential acquirers are our competitors or are persons or legal entities participating in companies, entities or persons that are or competitors and whether there is a risk of affecting market competition, or the potential acquirers could have access to confidential and privileged information; f) the morality and economic solvency of the potential acquirers; g) the protection of minority rights and the rights of our employees; and h) whether an adequate base of investors would be maintained. If CEMEX, S.A.B. de C.V.'s board of directors denies the authorization, the transfer had been authorized on the basis of false or incorrect information or information had been withheld or the requirements established in CEMEX, S.A.B. de C.V.'s by-laws are not complied with, the persons involved in the transfer shall not be entitled to exercise the voting rights corresponding to the transferred shares, and such shares shall not be taken into account for the determination of the quorums of attendance and voting at shareholders' meetings, nor shall the transfers be recorded in our share registry and the registry undertaken by S.D. Indeval, Institución para el Depósito de Valores, S.A. de C.V. ("Indeval"), the Mexican securities depositary, shall not have any effect.

Any acquisition of shares of CEMEX, S.A.B. de C.V.'s capital stock representing 30% or more of its capital stock by a person or group of persons requires prior approval from CEMEX, S.A.B. de C.V.'s board of directors and, in the event approval is granted, the acquirer has an obligation to make a public offer to purchase all of the outstanding shares of CEMEX, S.A.B. de C.V.'s capital stock. In the event the requirements for significant acquisitions of shares of CEMEX, S.A.B. de C.V.'s capital stock are not met, the persons acquiring such shares will not be entitled to any corporate rights with respect to such shares, such shares will not be taken into account for purposes of determining a quorum for shareholders' meetings, CEMEX, S.A.B. de C.V. will not record such persons as holders of such shares in its share registry, and the registry undertaken by the Indeval shall not have any effect.

CEMEX, S.A.B. de C.V.'s by-laws require the stock certificates representing shares of its capital stock to make reference to the provisions in its by-laws relating to the prior approval of the CEMEX, S.A.B. de C.V. board of directors for significant share transfers and the requirements for recording share transfers in its share registry. In addition, shareholders are responsible for informing CEMEX, S.A.B. de C.V. within five business days whenever their shareholdings exceed 5%, 10%, 15%, 20%, 25% and 30% of CEMEX, S.A.B. de C.V.'s capital stock. If a person acquires beneficial ownership (within the meaning of Rule 13d-3 promulgated by the SEC under the Securities Exchange Act of 1934) of 20% or more in voting power of the outstanding voting stock of CEMEX, S.A.B. de C.V., a change of control will be deemed to have occurred under the Credit Agreement and other debt agreements of CEMEX.

CEMEX, S.A.B. de C.V. is required to maintain a share registry to record the names, nationalities and domiciles of all significant shareholders, and any shareholder that meets or exceeds these thresholds must be recorded in this registry if such shareholder is to be recognized or represented at any shareholders' meeting. If a shareholder fails to inform CEMEX, S.A.B. de C.V. of its shareholdings reaching a threshold as described above, we will not record the transactions that cause such threshold to be met or exceeded in CEMEX, S.A.B. de C.V.'s share registry, and such transaction will have no legal effect and will not be binding on us.

CEMEX, S.A.B. de C.V.'s by-laws also require that its shareholders comply with legal provisions regarding acquisitions of securities and certain shareholders' agreements that require disclosure to the public.

### Repurchase Obligation

In accordance with Mexican securities regulations, CEMEX, S.A.B. de C.V. is obligated to make a public offer for the purchase of stock to its shareholders if CEMEX, S.A.B. de C.V.'s registration with the Mexican securities registry is canceled, either by resolution of its shareholders or by an order of the Mexican securities authority. The minimum price at which we must purchase the stock is the higher of:

- the weighted average price per share based on the weighted average trading price of CEMEX, S.A.B. de C.V.'s CPOs on the Mexican Stock Exchange during the latest period of 30 trading days preceding the date of the offer, for a period not to exceed six months; or
- the book value per share, as reflected in the last quarterly report filed with the Mexican securities authority and the Mexican Stock Exchange before the date of the offer.

CEMEX, S.A.B. de C.V.'s board of directors shall prepare and disclose to the public through the Mexican Stock Exchange, within ten business days after the day the public offer begins, and after consulting the corporate practices and finance committee, its opinion regarding the price of the offer and any conflicts of interests that each of its members may have regarding such offer. This opinion may be accompanied by an additional opinion issued by an independent expert that we may hire.

Following the cancellation of CEMEX, S.A.B. de C.V.'s registration with the Mexican securities registry, it must place in a trust set up for that purpose for a six-month period an amount equal to that required to purchase the remaining shares held by investors who did not participate in the offer.

## Shareholders' Meetings and Voting Rights

Shareholders' meetings may be called by:

- CEMEX, S.A.B. de C.V.'s board of directors or the corporate practices and finance committee or the audit committee;
- shareholders representing at least 10% of outstanding and fully paid shares, by requesting that it to the chairman of CEMEX, S.A.B. de C.V.'s board of directors or CEMEX, S.A.B. de C.V.'s corporate practices and finance committee and audit committee;
- any shareholder (i) if no meeting has been held for two consecutive years or when the matters referred
  to in Article 181 of the Mexican corporations law have not been dealt with, or (ii) when, for any
  reason, the required quorum for valid sessions of the corporate practices and finance committee and
  audit committee was not reached and the board of directors failed to make the appropriate provisional
  appointments; or
- a Mexican court of competent jurisdiction, in the event CEMEX, S.A.B. de C.V.'s board of directors or the corporate practices and finance committee and audit committee do not comply with the valid shareholders' request described above.

Notice of shareholders' meetings must be published through the electronic system established by the Ministry of Economy (Secretaría de Economía) or, in its absence, in the Official Gazette of the State of Nuevo León (*Periódico Oficial del Estado de Nuevo León*), Mexico or in any major newspaper published and distributed in the city of Monterrey, Nuevo León, Mexico. The notice must be published at least 15 days prior to the date of any shareholders' meeting. Consistent with Mexican law, CEMEX, S.A.B. de C.V.'s by-laws further require that all information and documents relating to the shareholders' meeting be available to shareholders from the date the notice of the meeting is published.

General shareholders' meetings can be ordinary or extraordinary. At every general shareholders' meeting, each qualified holder of Series A shares and Series B shares is entitled to one vote per share. Shareholders may vote by proxy duly appointed in writing. Under the CPO trust agreement, holders of CPOs who are not Mexican nationals cannot exercise voting rights corresponding to the Series A shares represented by their CPOs, in which case, the CPO trustee will vote the underlying Series A shares in the same manner as the holders of the majority of the voting shares.

An annual general ordinary shareholders' meeting must be held during the first four months after the end of each of CEMEX, S.A.B. de C.V.'s fiscal year to consider the approval of a report of its board of directors regarding CEMEX, S.A.B. de C.V.'s performance and its financial statements for the preceding fiscal year and to determine the allocation of profits from the preceding year. In addition, CEMEX, S.A.B. de C.V.'s annual general ordinary shareholders' meeting must:

- review the annual reports of CEMEX, S.A.B. de C.V.' corporate practices and finance committee and audit committee, its chief executive officer, and its board of directors;
- elect, remove, or substitute the members of CEMEX, S.A.B. de C.V.'s board of directors;
- determine the level of independence of the members of CEMEX, S.A.B. de C.V.'s board of directors;
- elect or remove the chairman of CEMEX, S.A.B. de C.V.'s audit and corporate practices and finance committees;
- approve any transaction that represents 20% or more of CEMEX, S.A.B. de C.V. consolidated assets;
- resolve any issues not reserved for extraordinary shareholders' meetings.

A general extraordinary shareholders' meeting may be called at any time to deal with any of the matters specified by Article 182 of the Mexican corporations law, which include, among other things:

- extending CEMEX, S.A.B. de C.V.'s corporate existence;
- CEMEX, S.A.B. de C.V.'s voluntary dissolution;
- increasing or reducing CEMEX, S.A.B. de C.V.'s fixed capital stock;
- changing CEMEX, S.A.B. de C.V.'s corporate purpose;
- changing CEMEX, S.A.B. de C.V.'s country of incorporation;
- changing CEMEX, S.A.B. de C.V.'s form of organization;
- a proposed merger;
- issuing preferred shares;
- redeeming CEMEX, S.A.B. de C.V.'s own shares;
- any amendment to CEMEX, S.A.B. de C.V.'s by-laws; and
- any other matter for which a special quorum is required by law or by CEMEX, S.A.B. de C.V.'s by-laws.

In order to vote at a meeting of shareholders, shareholders must (i) appear on the list that Indeval and the Indeval participants holding shares on behalf of the shareholders prepare prior to the meeting, or (ii) prior to the meeting, deposit the certificates representing their shares at CEMEX, S.A.B. de C.V.'s offices or in a Mexican credit institution or brokerage house that operates in accordance with applicable laws in Mexico. The certificate of deposit with respect to the share certificates must be presented to CEMEX, S.A.B. de C.V.'s company secretary at least 48 hours before a meeting of shareholders. CEMEX, S.A.B. de C.V.'s company secretary verifies that the person in whose favor any certificate of deposit was issued is named in CEMEX, S.A.B. de C.V.'s share registry and issues an admission pass authorizing that person's attendance at the meeting of shareholders.

CEMEX, S.A.B. de C.V.'s by-laws provide that a shareholder may only be represented by proxy in a shareholders' meeting with a duly completed form provided by CEMEX, S.A.B. de C.V. authorizing the proxy's presence. In addition, CEMEX, S.A.B. de C.V.'s by-laws require that the secretary acting at the shareholders' meeting publicly affirm the compliance by all proxies with this requirement. A shareholders' resolution is required to take action on any matter presented at a shareholders' meeting.

At an ordinary meeting of shareholders, the affirmative vote of the holders of a majority of the shares present at the meeting is required to adopt a shareholders' resolution. At an extraordinary meeting of shareholders, the affirmative vote of at least 50% of the capital stock is required to adopt a shareholders' resolution, except that when amending Article 7 (with respect to measures limiting shareholding ownership), Article 10 (relating to the register of shares and significant participations) or Article 22 (specifying the impediments to being appointed a member of CEMEX, S.A.B. de C.V.'s board of directors) of CEMEX, S.A.B. de C.V.'s by-laws, the affirmative vote of at least 75% of the voting stock is needed.

The attendance quorum for a general ordinary meeting of shareholders upon the first call, is 50% of CEMEX, S.A.B. de C.V.'s outstanding and fully paid shares, and for the second call is any number of CEMEX, S.A.B. de C.V.'s outstanding and fully paid shares. If the quorum is not met upon the first call, a subsequent meeting may be called and the quorum for the second ordinary meeting is any number of CEMEX, S.A.B. de C.V.'s outstanding and fully paid shares represented at the meeting. The attendance quorum for the extraordinary shareholders' meeting upon the first call, is 75% of CEMEX, S.A.B. de C.V.'s outstanding and fully paid shares, upon the second and subsequent calls is 50% of CEMEX, S.A.B. de C.V.'s outstanding and fully paid shares.

# Rights of Minority Shareholders

At CEMEX, S.A.B. de C.V.'s annual general ordinary shareholders' meeting, any shareholder or group of shareholders representing 10% or more of its voting stock has the right to appoint or remove one member of CEMEX, S.A.B. de C.V.'s board of directors, in addition to the directors appointed by the majority. Such appointment may only be revoked by other shareholders when the appointment of all other directors is also revoked.

CEMEX, S.A.B. de C.V.'s by-laws provide that holders of at least 10% of its capital stock are entitled to demand the postponement of the voting on any resolution of which they deem they have not been sufficiently informed.

Under Mexican law, holders of at least 20% of CEMEX, S.A.B. de C.V.'s outstanding capital stock entitled to vote on a particular matter may oppose any resolution at a shareholders' meeting, by filing a petition for a court order to suspend the resolution temporarily with a court of law within 15 days after the adjournment of the meeting at which that action was taken and showing that the challenged action violates Mexican law or CEMEX, S.A.B. de C.V.'s by-laws and provided the opposing shareholders deliver a bond to the court to secure payment of any damages that we suffer as a result of suspending the resolution in the event that the court ultimately rules against the opposing shareholders. Relief under these provisions is only available to holders who were entitled to vote on, or whose rights as shareholders were adversely affected by, the challenged shareholder action and whose shares were not represented when the action was taken or, if represented, voted against it.

Under Mexican law, an action for civil liabilities against directors may be initiated by a shareholders' resolution for violation of their duty of loyalty to shareholders. In the event shareholders decide to bring an action of this type, the persons against whom that action is brought will immediately cease to be directors. Additionally, shareholders representing not less than 33% of the outstanding shares may directly exercise that action against the directors; provided that:

- those shareholders shall not have voted against exercising such action at the relevant shareholders' meeting; and
- the claim covers all of the damage alleged to have been caused to us and not merely the damage suffered by the plaintiffs.

Under CEMEX, S.A.B. de C.V.'s by-laws, shareholders representing 5% or more of its outstanding capital stock may initiate actions exclusively on behalf of CEMEX, S.A.B. de C.V. against members of its board of directors, its corporate practices and finance committee and audit committee, its chief executive officer, or any relevant executives, for breach of their duty of care or duty of loyalty to shareholders or for committing illicit acts or activities. The only requirement is that the claim covers all of the damage alleged to have been caused to us or any entities on which we have a significant influence and not merely the damage suffered by the plaintiffs. Actions initiated on these grounds have a five-year statute of limitations from the day of the act or action that caused the damage.

Any recovery of damages with respect to these actions will be for CEMEX, S.A.B. de C.V.'s benefit and not that of the shareholders bringing the action.

## Registration and Transfer

CEMEX, S.A.B. de C.V.'s common stock is evidenced by share certificates in registered form with registered dividend coupons attached. Shareholders who have not deposited their shares into the CPO trust may hold their shares in the form of physical certificates or through institutions that have accounts with Indeval. Accounts may be maintained at Indeval by brokers, banks and other entities approved by the Mexican securities authority. CEMEX, S.A.B. de C.V. maintains a stock registry, and, in accordance with Mexican law, only those holders listed in CEMEX, S.A.B. de C.V.'s stock registry and those holding certificates issued by Indeval and by Indeval participants indicating ownership are recognized as CEMEX, S.A.B. de C.V. shareholders.

Pursuant to Mexican law, any transfer of shares must be registered in CEMEX, S.A.B. de C.V.'s stock registry, if effected physically, or through book entries that may be tracked back from CEMEX, S.A.B. de C.V.'s stock registry to the records of Indeval.

## Redemption

CEMEX, S.A.B. de C.V.'s capital stock is subject to redemption upon approval of our shareholders at an extraordinary shareholders' meeting.

#### Share Repurchases

If approved by CEMEX, S.A.B. de C.V.'s shareholders at a general shareholders' meeting, we may purchase CEMEX, S.A.B. de C.V.'s outstanding shares. The economic and voting rights corresponding to repurchased shares cannot be exercised during the period the shares are owned by us and the shares will be deemed outstanding for purposes of calculating any quorum or vote at any shareholders' meeting. We may also repurchase our equity securities on the Mexican Stock Exchange at the then prevailing market prices in accordance with Mexican securities law. If we intend to repurchase shares representing more than 1% of CEMEX, S.A.B. de C.V.'s outstanding shares at a single trading session, we must inform the public of such intention at least ten minutes before submitting our bid. If we intend to repurchase shares representing 3% or

more of CEMEX, S.A.B. de C.V.'s outstanding shares during a period of 20 trading days, we are required to conduct a public tender offer for such shares. We must conduct share repurchases through the person or persons approved by CEMEX, S.A.B. de C.V.'s board of directors, through a single broker dealer during the relevant trading session, and without submitting bids during the first and the last 30 minutes of each trading session. We must inform the Mexican Stock Exchange of the results of any share repurchase no later than the business day following any such share repurchase.

## Directors' and Shareholders' Conflict of Interest

Under Mexican law, any shareholder who has a conflict of interest with CEMEX, S.A.B. de C.V. with respect to any transaction is obligated to disclose such conflict and is prohibited from voting on that transaction. A shareholder who violates this prohibition may be liable for damages if the relevant transaction would not have been approved without that shareholder's vote.

Under Mexican law, any director who has a conflict of interest with CEMEX, S.A.B. de C.V. in any transaction must disclose that fact to the other directors and is prohibited from participating and being present during the deliberations and voting on that transaction. A director who violates this prohibition will be liable for damages and lost profits. Additionally, CEMEX, S.A.B. de C.V.'s directors may not represent shareholders in our shareholders' meetings.

#### Withdrawal Rights

Whenever CEMEX, S.A.B. de C.V.'s shareholders approve a change of corporate purpose, change of nationality or transformation from one form of corporate organization to another, Mexican law provides that any shareholder entitled to vote on that change who has voted against it may withdraw from CEMEX, S.A.B. de C.V. and receive an amount equal to the book value (in accordance with the latest balance sheet approved by the annual general ordinary shareholders' meeting) attributable to such shareholder's shares, provided that such shareholder exercises that right within 15 days following the meeting at which the change was approved.

#### Dividends

At each annual general ordinary shareholders' meeting, CEMEX, S.A.B. de C.V.'s board of directors submits, for approval by its shareholders, its financial statements together with a report on them prepared by its board of directors and the statutory auditors. CEMEX, S.A.B. de C.V.'s shareholders, once they have approved the financial statements, determine the allocation of our net income, after provision for income taxes, legal reserve and statutory employee profit sharing payments, for the preceding year. All shares of CEMEX, S.A.B. de C.V.'s capital stock outstanding at the time a dividend or other distribution is declared are entitled to share equally in that dividend or other distribution.

### Liquidation Rights

In the event CEMEX, S.A.B. de C.V. is liquidated, the surplus assets remaining after payment of all its creditors will be divided among CEMEX, S.A.B. de C.V.'s shareholders in proportion to the respective shares held by them. The liquidator may, with the approval of CEMEX, S.A.B. de C.V.'s shareholders, distribute the surplus assets in kind among CEMEX, S.A.B. de C.V.'s shareholders, sell the surplus assets and divide the proceeds among CEMEX, S.A.B. de C.V.'s shareholders or put the surplus assets to any other uses agreed to by a majority of CEMEX, S.A.B. de C.V.'s shareholders voting at an extraordinary shareholders' meeting.

# Differences Between Our Corporate Governance Practices and NYSE Standards for Domestic Companies

For a description of significant ways in which CEMEX, S.A.B. de C.V.'s corporate governance practices differ from those required of domestic companies under NYSE standards, see "Item 16G—Corporate Governance."

You may find additional information in the corporate governance section of our website (www.cemex.com), or you may contact our investment relations team, by writing to or telephoning us as follows:

CEMEX, S.A.B. de C.V.

Avenida Ricardo Margáin Zozaya #325 Colonia Valle del Campestre San Pedro Garza García, Nuevo León, México 66265. Attn: Eduardo Rendón

Telephone: +52 81 8888-4292 Email: eduardo.rendon@cemex.com

# **Share Capital**

CEMEX, S.A.B. de C.V. did not declare a dividend for fiscal years 2014, 2015 and 2016. See "Item 8—Financial Information—Dividends" for a description of CEMEX, S.A.B. de C.V.'s policy on dividend distributions and dividend restrictions.

At each of CEMEX, S.A.B. de C.V.'s 2014, 2015 and 2016 annual general ordinary shareholders' meetings, held on March 26, 2015, March 31, 2016 and March 30, 2017, respectively, CEMEX, S.A.B. de C.V.'s shareholders approved a recapitalization of retained earnings. New CPOs issued pursuant to each such recapitalization were allocated to shareholders on a pro-rata basis. As a result, shares equivalent to approximately 500 million CPOs, approximately 538 million CPOs and approximately 562.4 CPOs were allocated to shareholders on a pro-rata basis in connection with the 2014, 2015 and 2016 recapitalizations, respectively. In each case, CPO holders received one new CPO for each 25 CPOs held and ADS holders received one new ADS for each 25 ADSs held. There was no cash distribution and no entitlement to fractional shares.

As of December 31, 2016, CEMEX, S.A.B. de C.V.'s common stock was represented as follows:

	2016		
Shares <sup>1</sup> Seri	es A²	Series B <sup>3</sup>	
Subscribed and paid shares	583,148	14,060,791,574	
Unissued shares authorized for stock compensation programs 638,	,468,154	319,234,077	
Shares that guarantee the issuance of convertible securities <sup>4</sup> 5,218,	,899,920	2,609,449,960	
33,978,	951,222	16,989,475,611	

<sup>(1)</sup> As of December 31, 2016, 13,068,000,000 shares correspond to the fixed portion, and 37,900,426,833 shares correspond to the variable portion.

### **Material Contracts**

On March 14, 2006, CEMEX, S.A.B. de C.V. registered a Ps5 billion revolving promissory note program (programa dual revolvente de certificados bursátiles) with the Mexican securities authority. CEMEX, S.A.B. de C.V. has subsequently increased the authorized amount under this program. On March 31, 2010, we received authorization from the Mexican securities authority for a Ps10 billion revolving promissory note program, which authorization was valid until its expiration on March 31, 2015.

<sup>(2)</sup> Series "A" or Mexican shares must represent at least 64% of CEMEX, S.A.B. de C.V.'s capital stock.

<sup>(3)</sup> Series "B" or free subscription shares must represent at most 36% of CEMEX, S.A.B. de C.V.'s capital stock.

<sup>(4)</sup> Shares that guarantee the conversion of the November 2019 Mandatory Convertible Mexican Peso Notes, the March 2018 Optional Convertible Subordinated U.S. Dollar Notes and the March 2020 Optional Convertible Subordinated U.S. Dollar Notes.

On December 18, 2006, CEMEX, through two special purpose vehicles, issued two tranches of fixed-to-floating rate callable Perpetual Debentures. C5 Capital (SPV) Limited issued U.S.\$350 million original principal amount of Perpetual Debentures under the first tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2011 and on each interest payment date thereafter, of which U.S.\$61 million principal amount were outstanding as of December 31, 2016 (excluding Perpetual Debentures held by us). C10 Capital (SPV) Limited issued U.S.\$900 million original principal amount of Perpetual Debentures under the second tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2016 and on each interest payment date thereafter, of which U.S.\$175 million principal amount were outstanding as of December 31, 2016 (excluding Perpetual Debentures held by us). Both tranches pay coupons denominated in U.S. Dollars at a fixed rate until the call date and at a floating rate thereafter. On February 12, 2007, CEMEX, through a special purpose vehicle, issued a third tranche of fixed-to-floating rate callable Debentures. C8 Capital (SPV) Limited issued U.S.\$750 million original principal amount of Perpetual Debentures under this third tranche, with the issuer having the option to redeem such Perpetual Debentures on December 31, 2014 and on each interest payment date thereafter, of which U.S.\$135 million principal amount were outstanding as of December 31, 2016 (excluding Perpetual Debentures held by us). This third tranche also pays coupons denominated in U.S. Dollars at a fixed rate until the call date and at a floating rate thereafter. On May 9, 2007, CEMEX, through a special purpose vehicle, issued a fourth tranche of fixed-to-floating rate callable Perpetual Debentures. C10-EUR Capital (SPV) Limited issued €730 million original principal amount of Perpetual Debentures under this fourth tranche, with the issuer having the option to redeem such Perpetual Debentures on June 30, 2017, and on each interest payment date thereafter, of which €64 million principal amount were outstanding as of December 31, 2016 (excluding Perpetual Debentures held by us). This fourth tranche pays coupons denominated in Euros at a fixed rate until the call date and at a floating rate thereafter. Due to their perpetual nature and optional deferral of coupons, these transactions, in accordance with IFRS, qualify as equity.

For a description of the material terms relating to the November 2019 Mandatory Convertible Mexican Peso Notes, the March 2018 Optional Convertible Subordinated U.S. Dollar Notes and the March 2020 Optional Convertible Subordinated U.S. Dollar Notes, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments."

In connection with the Credit Agreement, we are also parties to the amendment and restatement agreement, dated July 23, 2015 related to the intercreditor agreement, dated as of September 17, 2012 and amended on October 31, 2014; the Dutch law share pledge, dated as of September 17, 2012; the Dutch law share pledge, dated as of December 15, 2015; the Swiss law share pledge, dated as of September 17, 2012; the security confirmation agreement, dated as of July 23, 2015; the security confirmation agreement, dated as of March 17, 2016; the Spanish law share pledge, dated as of November 8, 2012; the ratification and extension deed to the Spanish law share pledge, dated as of July 29, 2015; and the amendment and restatement agreement, dated July 29, 2015 to the Mexican law security trust agreement, dated as of September 17, 2012. For a description of the material terms of the Credit Agreement and related agreements, see "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Our Indebtedness."

For a description of the material terms relating to the Senior Secured Notes, see "Item 5—Operating and Financial Review and Prospects—Summary of Material Contractual Obligations and Commercial Commitments—Senior Secured Notes."

# **Exchange Controls**

See "Item 3—Key Information—Mexican Peso Exchange Rates."

#### **Taxation**

#### Mexican Tax Considerations

#### General

The following is a summary of certain Mexican federal income tax considerations relating to the ownership and disposition of CEMEX, S.A.B. de C.V.'s CPOs or ADSs.

This summary is based on Mexican income tax law that is in effect on the date of this annual report, which is subject to change. This summary is limited to non-residents of Mexico, as defined below, who own CEMEX, S.A.B. de C.V.'s CPOs or ADSs. This summary does not address all aspects of Mexican income tax law. Holders are urged to consult their tax counsel as to the tax consequences that the purchase, ownership and disposition of CEMEX, S.A.B. de C.V.'s CPOs or ADSs, may have.

For purposes of Mexican taxation, an individual is a resident of Mexico if he or she has established his or her home in Mexico. If the individual also has a home in another country, he or she will be considered a resident of Mexico if his or her center of vital interests is in Mexico. Under Mexican law, an individual's center of vital interests is in Mexico if, among other things:

- more than 50% of the individual's total income in the relevant year comes from Mexican sources; or
- the individual's main center of professional activities is in Mexico.

Mexican nationals that are employed by the Mexican government are deemed residents of Mexico, even if his or her center of vital interests is located outside of Mexico. Unless otherwise proven, Mexican nationals are deemed residents of Mexico for tax purposes.

A legal entity is a resident of Mexico if it is organized under the laws of Mexico or if it maintains the principal administration of its business or the effective location of its management in Mexico.

A Mexican citizen is presumed to be a resident of Mexico for tax purposes unless such person or entity can demonstrate otherwise. If a legal entity or an individual is deemed to have a permanent establishment in Mexico for tax purposes, all income attributable to such permanent establishment will be subject to Mexican taxes, in accordance with relevant tax provisions.

Individuals or legal entities that cease to be residents of Mexico must notify the tax authorities within 15 business days before their change of residency.

A non-resident of Mexico is a legal entity or individual that does not satisfy the requirements to be considered a resident of Mexico for Mexican federal income tax purposes.

#### Taxation of Dividends

Dividends from earnings generated before January 1, 2014, either in cash or in any other form, paid to non-residents of Mexico with respect to Series A shares or Series B shares represented by the CPOs (or in the case of holders who hold CPOs represented by ADSs), will not be subject to withholding tax in Mexico.

As a result of the enactment of certain tax provisions in Mexico, as of January 1, 2014, dividends in cash from identified pre-tax retained earnings generated after January 1, 2014 will be subject to a 10% withholding tax. This tax is considered as a definitive payment.

#### Disposition of CPOs or ADSs

As a result of the enactment of certain tax provisions in Mexico, as of January 1, 2014, in the case of individuals, capital gains of shares issued by Mexican companies in the Mexican Stock Exchange will be subject

to a 10% withholding tax which will be withheld by the intermediary acting as a withholding agent. If the individual is a tax resident in a country with a tax treaty in force with Mexico such individual will not be subject to any withholding tax.

Gains on the sale or disposition of CPOs by a holder who is a non-resident of Mexico will not be subject to any Mexican tax if the sale is carried out through the Mexican Stock Exchange or other recognized securities market, as determined by Mexican tax authorities. Gains realized on sales or other dispositions of CPOs by non-residents of Mexico made in other circumstances would be subject to Mexican income tax. However, gains on the sale or disposition of ADSs by a holder who is a non-resident of Mexico will not be subject to Mexican tax.

Under the terms of the Convention Between the United States and Mexico for Avoidance of Double Taxation and Prevention of Fiscal Evasion with Respect to Income Taxes, and a protocol thereto, the Tax Treaty, gains obtained by a U.S. Shareholder (as defined herein) eligible for benefits under the Tax Treaty on the disposition of CPOs will not generally be subject to Mexican tax, provided that such gains are not attributable to a permanent establishment of such U.S. Shareholder in Mexico and that the eligible U.S. Shareholder did not own, directly or indirectly, 25% or more of our outstanding stock during the 12-month period preceding the disposition. In the case of non-residents of Mexico eligible for the benefits of a tax treaty, gains derived from the disposition of ADSs or CPOs may also be exempt, in whole or in part, from Mexican taxation under a treaty to which Mexico is a party.

Deposits and withdrawals of ADSs will not give rise to any Mexican tax or transfer duties.

The term U.S. Shareholder shall have the same meaning ascribed below under the section "U.S. Federal Income Tax Considerations."

## Estate and Gift Taxes

There are no Mexican inheritance or succession taxes applicable to the ownership, transfer or disposition of ADSs or CPOs by holders that are non-residents of Mexico, although gratuitous transfers of CPOs may, in some circumstances, cause a Mexican federal tax to be imposed upon a recipient. There are no Mexican stamp, issue, registration or similar taxes or duties payable by holders of ADSs or CPOs.

### U.S. Federal Income Tax Considerations

#### General

The following is a summary of certain U.S. federal income tax consequences relating to the ownership and disposition of CEMEX, S.A.B. de C.V.'s CPOs and ADSs.

This summary is based on provisions of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), U.S. Treasury regulations promulgated under the Code, administrative rulings, and judicial interpretations of the Code, all as in effect on the date of this annual report and all of which are subject to change, possibly retroactively. This summary is limited to U.S. Shareholders (as defined below) who hold our ADSs or CPOs, as the case may be, as capital assets. This summary does not discuss all aspects of U.S. federal income taxation that may be important to an investor in light of its individual circumstances, for example, an investor subject to special tax rules (e.g., banks, thrifts, real estate investment trusts, regulated investment companies, insurance companies, dealers in securities or currencies, expatriates, tax-exempt investors, persons who own 10% or more of our voting stock, or holders whose functional currency is not the U.S. Dollar or U.S. Shareholders who hold a CPO or an ADS as a position in a "straddle," as part of a "synthetic security" or "hedge," as part of a "conversion transaction" or other integrated investment, or as other than a capital asset). In addition, this summary does not address the Medicare tax imposed on certain net investment income or any aspect of state, local foreign, gift, estate or alternative minimum tax considerations.

For purposes of this summary, a "U.S. Shareholder" means a beneficial owner of CPOs or ADSs, who is for U.S. federal income tax purposes:

- an individual citizen or resident of the United States;
- a corporation or other entity taxable as a corporation that is created or organized in the United States or under the laws of the United States or any political subdivision thereof;
- an estate the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons are authorized to control all substantial decisions or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

If a partnership (including any entity arrangement treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of CPOs or ADSs, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. A partner in a partnership that is the beneficial owner of CPOs or ADSs should consult its tax advisor regarding the associated tax consequences.

U.S. Shareholders should consult their tax advisors as to the particular tax consequences to them under United States federal, state and local, and foreign laws relating to the ownership and disposition of CEMEX, S.A.B. de C.V.'s CPOs and ADSs.

## Ownership of CPOs or ADSs in general

In general, for U.S. federal income tax purposes, U.S. Shareholders who own ADSs will be treated as the beneficial owners of the CPOs represented by those ADSs, and each CPO will represent a beneficial interest in two Series A shares and one Series B share.

# Taxation of distributions with respect to CPOs and ADSs

A distribution of cash or property with respect to the Series A shares or Series B shares represented by CPOs, including CPOs represented by ADSs, generally will be treated as a dividend to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be includible in the gross income of a U.S. Shareholder as foreign source "passive" income on the date the distribution is received by the CPO trustee or successor thereof. Any such dividend will not be eligible for the dividends-received deduction allowed to corporate U.S. Shareholders. To the extent, if any, that the amount of any distribution by us exceeds our current and accumulated earnings and profits as determined under U.S. federal income tax principles, it will be treated first as a tax-free return of the U.S. Shareholder's adjusted tax basis in the CPOs or ADSs, as applicable, and thereafter as capital gain.

The gross amount of any dividends paid in Mexican Pesos will be includible in the income of a U.S. Shareholder in a Dollar amount calculated by reference to the exchange rate in effect the day the Mexican Pesos are received by the CPO trustee or successor thereof whether or not the Mexican Pesos are converted into Dollars on that day. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is includible in income to the date such payment is converted into Dollars will be treated as ordinary income or loss. Such gain or loss will generally be income from sources within the United States for foreign tax credit limitation purposes.

Dividend income is generally taxed as ordinary income. However "qualified dividend income" received by U.S. Shareholders that are individuals (as well as certain trusts and estates) is generally eligible for preferential U.S. federal income tax rates (provided that certain holding period requirements are met). "Qualified dividend income" includes dividends paid on shares of "qualified foreign corporations" if, among other things: (i) the

shares of the foreign corporation are readily tradable on an established securities market in the United States, or (ii) the foreign corporation is eligible with respect to substantially all of its income for the benefits of a comprehensive income tax treaty with the United States which contains an exchange of information program.

We believe that we are a "qualified foreign corporation" because (i) the ADSs trade on the New York Stock Exchange and (ii) we are eligible for the benefits of the comprehensive income tax treaty between Mexico and the United States which includes an exchange of information program. Accordingly, we believe that any dividends we pay should constitute "qualified dividend income" for U.S. federal income tax purposes. We cannot assure you, however, that we will continue to be considered a "qualified foreign corporation" and that our dividends will continue to be "qualified dividend income."

### Taxation of capital gains on disposition of CPOs or ADSs

The sale, exchange, redemption, or other disposition of CPOs or ADSs will result in the recognition of gain or loss by a U.S. Shareholder for U.S. federal income tax purposes in an amount equal to the difference between the amount realized on the disposition and the U.S. Shareholder's tax basis in the CPOs or ADSs, as applicable. Such gain or loss will be long-term capital gain or loss if the U.S. Shareholder's holding period for the CPOs or ADSs exceeds one year at the time of disposition. Long-term capital gain recognized by a U.S. Shareholder that is an individual (as well as certain trusts and estates) upon the sale or exchange of CPOs or ADSs is generally eligible for preferential U.S. federal income tax rates. The deduction of capital losses is subject to limitations. Gain from the disposition of CPOs or ADSs generally will be treated as U.S. source for foreign tax credit purposes; losses will generally be allocated against U.S. source income. Deposits and withdrawals of CPOs by U.S. Shareholders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

### United States backup withholding and information reporting

A U.S. Shareholder may, under certain circumstances, be subject to information reporting with respect to some payments to that U.S. Shareholder such as dividends or the proceeds of a sale or other disposition of the CPOs or ADSs. Backup withholding also may apply to amounts paid to such holder unless such holder (i) is a corporation or comes within certain exempt categories and demonstrates this fact when so required, or (ii) provides a correct taxpayer identification number and otherwise complies with applicable requirements of the backup withholding rules. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be creditable against the U.S. Shareholder's federal income tax liability, and the U.S. Shareholder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and timely furnishing any required information.

Pursuant to the Hiring Incentives to Restore Employment Act enacted on March 18, 2010, an individual U.S. Shareholder may be required to submit to the IRS certain information with respect to his or her beneficial ownership of CPOs or ADSs, unless such CPOs or ADSs are held on his or her behalf by a U.S. financial institution. The law also imposes penalties if an individual U.S. Shareholder is required to submit such information to the IRS and fails to do so. U.S. Shareholders should consult their tax advisors regarding the application of the new law in their particular circumstances.

## **Documents on Display**

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, in accordance with these requirements, file reports and information statements and other information with the SEC. These reports and information statements and other information filed by us with the SEC can be inspected and copied at the public reference room of the SEC at 100 F Street, N.E., Washington, D.C. 20549.

In reviewing the agreements included as exhibits to this annual report, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about us or the other parties to the agreements.

The agreements may contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation
  of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time.

# Item 11—Quantitative and Qualitative Disclosures About Market Risk

See "Item 5—Operating and Financial Review and Prospects—Quantitative and Qualitative Market Disclosure—Our Derivative Financial Instruments."

## Item 12—Description of Securities Other than Equity Securities

#### **Item 12A—Debt Securities**

Not applicable.

# Item 12B—Warrants and Rights

Not applicable.

### **Item 12C—Other Securities**

Not applicable.

## **Item 12D—American Depositary Shares**

# **Depositary Fees and Charges**

Under the terms of the Deposit Agreement for CEMEX, S.A.B. de C.V.'s ADSs, an ADS holder may have to pay the following service fees to the depositary:

Services	Fees
Issuance of ADSs upon deposit of eligible securities	Up to 5¢ per ADS issued.
Surrender of ADSs for cancellation and withdrawal of deposited securities	Up to 5¢ per ADS surrendered.
Exercise of rights to purchase additional ADSs	Up to 5¢ per ADS issued.
Distribution of cash (i.e., upon sale of rights and other entitlements)	Up to 2¢ per ADS held.

An ADS holder also is responsible to pay fees and expenses incurred by the ADS depositary and taxes and governmental charges including, but not limited to:

• transfer and registration fees charged by the registrar and transfer agent for eligible and deposited securities, such as upon deposit of eligible securities and withdrawal of deposited securities;

- expenses incurred for converting foreign currency into Dollars;
- expenses for cable, telex and fax transmissions and for delivery of securities;
- expenses incurred in connection with compliance with exchange control regulations and other applicable regulatory requirements;
- fees and expenses incurred in connection with the delivery of deposited securities; and
- taxes and duties upon the transfer of securities, such as when eligible securities are deposited or withdrawn from deposit.

We have agreed to pay some of the other charges and expenses of the ADS depositary. Note that the fees and charges that a holder of ADSs is required to pay may vary over time and may be changed by us and by the ADS depositary. ADS holders will receive notice of the changes. The fees described above may be amended from time to time.

# Depositary Payments for the year ended December 31, 2016

In 2016, we received approximately U.S.\$1.9 million (after applicable U.S. taxes and including payments to third parties) from our Depositary Bank, Citibank, N.A., to reimburse us for contributions towards our investor relations activities (including but not limited to investor meetings, conferences and fees to investor relations service vendors) and other miscellaneous expenses related to the listing of our ADSs on the NYSE.

#### **PART II**

## Item 13—Defaults, Dividend Arrearages and Delinquencies

None.

## Item 14—Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

## **Item 15—Controls and Procedures**

# **Background and Internal Investigation**

As previously disclosed in our consolidated financial statements, during 2016 CEMEX received reports through its anonymous reporting line related to possible irregularities in the purchase process of land in connection with the Maceo Project. CEMEX initiated an investigation and internal audit in accordance with its corporate governance policies and its code of ethics, which confirmed the irregularities in the purchase process of land in connection with the Maceo Project. As a result of this investigation and internal audit, on September 23, 2016, CEMEX Latam and CEMEX Colombia terminated the employment of the Vice President of Planning of CEMEX Latam, who was also CEMEX Colombia's Director of Planning, and the Legal Counsel of CEMEX Latam, who was also the General Counsel of CEMEX Colombia. In addition, effective September 23, 2016, the Chief Executive Officer of CEMEX Latam, who was also the President of CEMEX Colombia, resigned to facilitate the investigation and internal audit.

Since September 2016, we engaged legal counsel, forensic and other advisors to investigate and advise with regard to different matters regarding the Maceo Project, including with respect to our internal controls. We subsequently filed a criminal complaint against four former employees of CEMEX Colombia. The implicated employees, allegedly acting in collusion, were able to intentionally circumvent the then existing internal controls.

While the irregularities occurred in a number of periods prior to 2016, CEMEX performed a qualitative and quantitative evaluation of the resulting financial statement effects and concluded that none of them individually, or in aggregate, were material to any such periods. Accordingly, we have not restated any previously issued financial statements.

#### **Disclosure Controls and Procedures**

Our management has evaluated, with the participation of CEMEX, S.A.B. de C.V.'s Chief Executive Officer and Executive Vice President of Finance/Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this annual report. Based on the foregoing, our management, with the participation of CEMEX, S.A.B. de C.V.'s Chief Executive Officer and Executive Vice President of Finance/Chief Financial Officer, concluded that our disclosure controls and procedures were not effective as of December 31, 2016 to achieve their intended objectives. As further described below, we have identified a material weakness in our internal control over financial reporting, which substantially overlaps with our disclosure controls and procedures.

### Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934). Internal control over financial reporting refers to a process designed by, or under the supervision of, our Chief Executive Officer and our Chief Financial Officer and effected by CEMEX, S.A.B. de C.V.'s board of directors, our management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of
  financial statements in accordance with generally accepted accounting principles, and that our receipts
  and expenditures are being made only in accordance with authorizations of our management and
  members of CEMEX, S.A.B. de C.V.'s board of directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

A material weakness (as defined in Rule 12b-2 under the Exchange Act) is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

Under the supervision and with the participation of our management, including CEMEX, S.A.B. de C.V.'s Chief Executive Officer, Executive Vice President of Finance/Chief Financial Officer and principal financial and accounting officers, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2016 using criteria established in "Internal Control—Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management has identified the following material weakness in internal control over financial reporting as of December 31, 2016: our risk assessment process did not operate effectively to implement controls that would prevent, or detect and correct, misstatements resulting from apparent collusion or management override of controls in relation to significant unusual transactions. In addition, we did not design and operate effective monitoring controls to detect non-compliance with our policies related to the financial reporting of significant unusual transactions.

The control deficiencies described above resulted in immaterial misstatements that were corrected in the consolidated financial statements as of and for the fiscal year ended December 31, 2016, as disclosed in note 24A of our consolidated financial statements. We have concluded that the consolidated financial statements included in this annual report fairly present, in all material respects, our financial position, results of operations and cash flows as of and for the period ended December 31, 2016.

The control deficiencies described above created a reasonable possibility that a material misstatement to the consolidated financial statements would not be prevented or detected on a timely basis; accordingly our management has concluded that internal control over financial reporting was not effective as of December 31, 2016.

#### **Remediation Plan and Activities**

Our management is engaged in remedial activities to address the material weakness described above. We have initiated the implementation of practices and procedures over significant unusual transactions to ensure effective monitoring. These practices include a new approval policy over significant unusual transactions that takes place at the operating subsidiary level, a corporate committee to oversee large investment projects, enhancements to our internal audit procedures and improvements over our current monitoring controls in order to make them operate at a sufficient level of precision.

The material weakness will not be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. We expect that the remediation of this material weakness will be completed prior to the end of fiscal year 2017.

## Attestation Report of the Independent Registered Public Accounting Firm

KPMG Cárdenas Dosal, S.C., the registered public accounting firm that audited our financial statements included elsewhere in this annual report, has issued an adverse report on our internal control over financial reporting, which is included on page F-110 of this annual report.

## **Changes in Internal Control Over Financial Reporting**

Except for the material weakness disclosed above that was identified and evaluated in the fourth quarter but that occurred in an earlier period, we have not identified changes in our internal controls over financial reporting during 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Item 16—[RESERVED]

## Item 16A—Audit Committee Financial Expert

Our Board of Directors has determined that it has at least one "audit committee financial expert" (as defined in Item 16A of Form 20-F) serving on its audit committee. Mr. José Manuel Rincón Gallardo meets the requisite qualifications.

#### Item 16B—Code of Ethics

We have adopted a written code of ethics that applies to all employees, including our principal executive officer, principal financial officer and principal accounting officer, to ensure that all of our employees abide by the same high standards of conduct in their daily interactions.

Our code of ethics provides the following main guidelines:

- (i) Our purpose, mission and values: we look to build a better future through the creation of sustainable value by providing industry-leading products and solutions to satisfy the construction needs of our customers;
- (ii) Our people and human rights: we believe our employees give us a competitive advantage; we foster an encouraging environment for individual growth acting pursuant to our principles and values;
- (iii) Customer relations and fair dealing: we work to be our customers' best option and, to that end, conduct our business dealings fairly and professionally, and supply top-quality services and products as agreed with our customers; we and our employees make every possible effort to act in an innovative and proactive manner, exceeding our customers' expectations and anticipating their needs in order to ensure long and mutually beneficial relationships;
- (iv) Supplier relations and fair dealing: our success depends on supplier relationships that are built on trust and mutual benefit; we try to always manage our supplier relationships with honesty, respect and integrity, offering equal opportunities to all parties;
- (v) Government relations: our operations require a wide range of interactions with government agencies in many countries; these agencies may act as regulators, customers, suppliers, stockholders and/or promoters; we try to always conduct our interactions with these agencies consistent with our principles and values, with particular emphasis on honesty and respect;
- (vi) Community relations: we are committed to promoting and contributing to the development of our communities by preserving the environment, fostering mutually beneficial relationships and maintaining open lines of communication;
- (vii) Antitrust compliance: we are dedicated to conducting all of our business activities with the highest ethical standards; compliance with applicable laws, including antitrust legislation, is a fundamental part of our corporate values; we operate in many countries and are subject to different antitrust laws and regulations; therefore, our country managers must ensure that all of our business activities conform to local laws and regulations, and to our own policies;
- (viii) Anti-bribery: we reject all forms of corruption; paying or receiving bribes is illegal and highly unethical, and can lead to severe consequences for all parties involved, including jail for individuals and harsh penalties to our company; we are committed to conducting our business with transparency and integrity, and try to ensure that all transactions comply with anti-bribery laws, including requirements to maintain complete and accurate books and records;
- (ix) Preventing money laundering: we prohibit money laundering, understood as any transaction or series thereof undertaken to conceal the true origin of illicit funds or making them look as they have been obtained from legitimate activities;
- (x) Conflicts of interest and corporate opportunities. our employees, officers and directors have an obligation to conduct themselves in an honest and ethical manner and to act in our best interest; our employees, officers and directors must avoid situations that present or could present a potential or actual conflict between their interests and our interests;
- (xi) Gifts, services and other courtesies: we, our employees, officers and directors may not accept or give courtesies of any kind that may compromise, or appear to compromise, decision-making on current or future negotiations; it is forbidden to seek or condition a negotiation on any kind of gift, service or courtesy;

- (xii) Environmental responsibility: managing our environmental footprint is an integral part of our business philosophy and, therefore, we are fully committed to carrying out our business activities in an environmentally responsible and sustainable manner to minimize the environmental implications of our activities;
- (xiii) Political contributions and activities: we acknowledge and respect the right of our employees to participate in activities external to the company, such as politics, provided that they are legal and do not interfere with the employees' duties and responsibilities or in any way involve the company;
- (xiv) Health and safety in the workplace: we give highest priority to preventing incidents and safeguarding the health and safety of our workforce and are fully committed to carrying out our business activities in a safe and efficient manner to care for the well-being of all those on our sites and those who may be impacted by our activities;
- (xv) Confidential information: our employees must administer and handle confidential information in a responsible, safe, objective and legal manner;
- (xvi) Financial controls and records: we seek to build credibility and trust with our stakeholders and try to communicate effectively with them so that they are provided with full and accurate information about our financial condition and results of operations; consequently, our employees, officers and directors must ensure, within the scope of their responsibilities and duties, that our financial records are accurate and our financial controls effective; we must also ensure that our reports and documents filed with or submitted to securities regulators, as well as all other public communications, include full, fair, accurate, timely and understandable disclosure; and
- (xvii) Preservation of assets: the proper use and preservation of our tangible and intangible assets are essential to fulfill our mission.

We ensure awareness and enforcement of our code of ethics through our ethics committees, training programs, and secured internal communications channels. We periodically evaluate and update the provisions of our code of ethics.

You may view our code of ethics in the corporate governance section of our website (www.cemex.com), or you may request a copy of our code of ethics, at no cost, by writing to or telephoning us as follows:

CEMEX, S.A.B. de C.V.
Avenida Ricardo Margáin Zozaya #325
Colonia Valle del Campestre
San Pedro Garza García, Nuevo León, México 66265.
Attn: Luis Hernández
Telephone: +52 81 8888-8888

## Item 16C—Principal Accountant Fees and Services

Audit Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps248 million in fiscal year 2016 in connection with the professional services rendered for the audit of our annual financial statements and services normally provided by them relating to statutory and regulatory filings or engagements. In fiscal year 2015, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps230 million for these services.

Audit-Related Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps7 million in fiscal year 2016 for assurance and related services reasonably related to the performance of our audit. In fiscal year 2015, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps22 million for audit-related services.

*Tax Fees*: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps20 million in fiscal year 2016 for tax compliance, tax advice and tax planning. In fiscal year 2015, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us approximately Ps14 million for tax-related services.

All Other Fees: KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide billed us Ps16 million in fiscal year 2016 for products and services other than those comprising audit fees, audit-related fees and tax fees. In fiscal year 2015, KPMG Cárdenas Dosal, S.C. in Mexico and KPMG firms worldwide charged us approximately Ps12 million for products and services in this category. These fees relate mainly to services provided by KPMG to us with respect to our due diligence activities around the world.

# **Audit Committee Pre-Approval Policies and Procedures**

Our audit committee is responsible, among other things, for the appointment, compensation and oversight of our external auditors. To assure the independence of our independent auditors, our audit committee pre-approves annually a catalog of specific audit and non-audit services in the categories Audit Services, Audit-Related Services, Tax-Related Services, and Other Services that may be performed by our auditors, as well as the budgeted fee levels for each of these categories. All other permitted services must receive a specific approval from our audit committee. Our external auditor periodically provides a report to our audit committee in order for our audit committee to review the services that our external auditor is providing, as well as the status and cost of those services.

During 2016, there were no services provided to us by our external auditors that were performed pursuant to the de minimis exception.

## Item 16D—Exemptions from the Listing Standards for Audit Committees

Not applicable.

# Item 16E—Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

## Item 16F—Change in Registrant's Certifying Accountant

Not applicable.

# **Item 16G—Corporate Governance**

Section 303A.11 of the NYSE Listed Company Manual ("LCM") requires that listed foreign private issuers, such as CEMEX, disclose any significant ways in which their corporate governance practices differ from those followed by U.S. companies under NYSE listing standards.

CEMEX's corporate governance practices are governed by its by-laws, by the corporate governance provisions set forth in the Mexican Securities Market Law, the Circular de Emisoras (the "Mexican Regulation for Issuers") issued by the Comisión Nacional Bancaria y de Valores (the "Mexican Banking and Securities Commission") and the Reglamento Interior de la Bolsa Mexicana de Valores (the "Mexican Stock Exchange Rules") (the Mexican Securities Market Law, the Mexican Regulation for Issuers and the Mexican Stock Exchange Rules, collectively the "Mexican Laws and Regulations"), and by applicable U.S. securities laws. CEMEX is also subject to the rules of the NYSE to the extent they apply to foreign private issuers. Except for those specific rules, foreign private issuers are permitted to follow home country practice in lieu of the provisions of Section 303A of the LCM.

CEMEX, on a voluntary basis, also complies with the Código de Mejores Prácticas Corporativas (the "Mexican Code of Best Corporate Practices") as indicated below, which was promulgated by a committee established by the Consejo Coordinador Empresarial ("Mexican Corporate Coordination Board"). The Mexican Corporate Coordination Board provides recommendations for better corporate governance practices for listed companies in Mexico, and the Mexican Code of Best Corporate Practices has been endorsed by the Mexican Banking and Securities Commission.

The following is a summary of significant ways in which our corporate governance practices differ from those required to be followed by U.S. domestic companies under the NYSE's listing standards.

## NYSE LISTING STANDARDS

### CEMEX CORPORATE GOVERNANCE PRACTICE

#### 303A.01

Listed companies must have a majority of independent directors.

Pursuant to the Mexican Securities Market Law, CEMEX, S.A.B. de C.V. is required to have a board of directors with a maximum of 21 members, 25% of whom must be independent. Determination as to the independence of CEMEX, S.A.B. de C.V.'s directors is made upon their election by CEMEX, S.A.B. de C.V.'s shareholders at the corresponding meeting. As of December 31, 2016, CEMEX, S.A.B. de C.V.'s Board of Directors had 13 members, of which more than 50% are independent under the Mexican Securities Market Law.

The Mexican Securities Market Law sets forth, in article 26, the definition of "independence," which differs from the one set forth in Section 303A.02 of the LCM. Generally, under the Mexican Securities Market Law, a director is not independent if such director is an employee or officer of the company or its subsidiaries; an individual that has significant influence over the company or its subsidiaries; a shareholder that is part of a group that controls the company; or, if there exist certain relationships between a company and a director, entities with which the director is associated or family members of the director.

### 303A.03

Non-management directors must meet at regularly scheduled executive sessions without management.

Under CEMEX, S.A.B. de C.V.'s by-laws and the Mexican Laws and Regulations, our non-management and independent directors are not required to meet in executive sessions. Our Board of Directors must meet at least once every three months.

### 303A.04

Listed companies must have a nominating/ corporate governance committee composed of independent directors. Under CEMEX, S.A.B. de C.V.'s by-laws and the Mexican Laws and Regulations, we are not required to have a nominating committee. We do not have such a committee.

Our Corporate Practices and Finance Committee operates pursuant to the provisions of the Mexican Securities Market Law and CEMEX, S.A.B. de C.V.'s by-laws. Our Corporate Practices and Finance Committee is composed of four independent directors.

### CEMEX CORPORATE GOVERNANCE PRACTICE

Our Corporate Practices and Finance Committee is responsible for evaluating the performance of our executive officers; reviewing related party transactions; reviewing the compensation paid to executive officers; evaluating any waivers granted to directors or executive officers for their taking of corporate opportunities; and carrying out the activities described under Mexican law.

Our Corporate Practices and Finance Committee meets as required by CEMEX, S.A.B. de C.V.'s by-laws and by the Mexican Laws and Regulations.

#### 303A.05

Listed companies must have a compensation committee composed of independent directors.

Compensation committee members must satisfy additional independence requirements specific to compensation committee membership.

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act.

Under CEMEX, S.A.B. de C.V.'s by-laws and the Mexican Laws and Regulations, we are not required to have a compensation committee. We do not have such a committee.

CEMEX, S.A.B. de C.V.'s Audit Committee operates pursuant to the provisions of the Mexican Securities Market Law and CEMEX, S.A.B. de C.V.'s by-laws.

CEMEX, S.A.B. de C.V.'s Audit Committee is composed of four members. According to CEMEX, S.A.B. de C.V.'s by-laws, all of the members must be independent.

CEMEX, S.A.B. de C.V.'s Audit Committee is responsible for evaluating the company's internal controls and procedures, identifying any material deficiencies it finds; following up with any corrective or preventive measures adopted with respect to the non-compliance with the operation and accounting guidelines and policies; evaluating the performance of the external auditors; describing and valuating those non-audit services rendered by the external auditor; reviewing the company's financial statements; assessing the effects of any modifications to the accounting policies approved during a fiscal year; overseeing measures adopted as result of any observations made by shareholders, directors, executive officers, employees or any third parties with respect to accounting, internal controls and internal and external audit, as well as any complaints regarding irregularities in management, including anonymous and confidential methods for addressing concerns raised by employees; assuring the execution of resolutions adopted at shareholders' or board of directors' meetings.

CEMEX, S.A.B. de C.V.'s Board of Directors has determined that it has an "audit committee financial expert," for purposes of the Sarbanes-Oxley Act of 2002, serving on its Audit Committee.

### CEMEX CORPORATE GOVERNANCE PRACTICE

CEMEX, S.A.B. de C.V.'s Audit Committee meets as required by CEMEX, S.A.B. de C.V.'s by-laws and by the Mexican Laws and Regulations.

#### 303A.09

Listed companies must adopt and disclose corporate governance guidelines.

Under CEMEX, S.A.B. de C.V.'s by-laws and the Mexican Laws and Regulations, we are not required to adopt corporate governance guidelines, but, on an annual basis, we file a report with the Mexican Stock Exchange regarding our compliance with the Mexican Code of Best Corporate Practices.

## 303A.10

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.

CEMEX, S.A.B. de C.V. has adopted a written code of ethics that applies to all of our employees, including our principal executive officer, principal financial officer and principal accounting officer.

# **Equity compensation plans**

Equity compensation plans require shareholder approval under the Mexican Securities Market Law, subject to limited exemptions. Shareholder approval is not expressly required under CEMEX, S.A.B. de C.V.'s by-laws for the adoption and amendment of an equity compensation plan. However, at our 2011 annual shareholders' meeting held on February 23, 2012, CEMEX, S.A.B. de C.V.'s shareholders resolved to extend our current stock program for our employees, officers and administrators until December 31, 2018.

## Item 16H—Mine Safety Disclosure

The information concerning mine safety violations and other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act is included in Exhibit 15.1 to this annual report.

#### **PART III**

## **Item 17—Financial Statements**

Not applicable.

## **Item 18—Financial Statements**

See pages F-1 through F-111, incorporated herein by reference.

## Item 19—Exhibits

- 1.1 Amended and Restated By-laws of CEMEX, S.A.B. de C.V.(a)
- 2.1 Form of Certificate for shares of Series A Common Stock of CEMEX, S.A.B. de C.V.(k)
- 2.2 Form of Certificate for shares of Series B Common Stock of CEMEX, S.A.B. de C.V.(k)
- 2.3 English Translation of Amended and Restated Agreement to the Trust Agreement dated November 27, 2014, between CEMEX, S.A.B. de C.V., as founder of the trust, and Banco Nacional de México, S.A. regarding the CPOs.(j)
- 2.4 Form of CPO Certificate.(1)
- 2.5 Form of Second Amended and Restated Deposit Agreement (Series A and Series B share CPOs), dated August 10, 1999, among CEMEX, S.A. de C.V., Citibank, N.A. and holders and beneficial owners of American Depositary Shares.(b)
- 2.5.1 Amendment No. 1 to the Second Amended and Restated Deposit Agreement, dated as of July 1, 2005, by and among CEMEX, S.A. de C.V., Citibank, N.A., as Depositary, and all holders and beneficial owners from time to time of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of ADR attached thereto.(d)
- 2.5.2 Amendment No. 2 to the Second Amended and Restated Deposit Agreement, dated as of February 11, 2015, by and among CEMEX, S.A.B. de C.V., Citibank, N.A., as Depositary, and all holders and beneficial owners from time to time of American Depositary Shares evidenced by American Depositary Receipts issued thereunder, including the form of ADR attached thereto.(k)
- 2.5.3 Letter Agreement, dated October 12, 2007, by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to enable the Depositary to establish a direct registration system for the ADSs.(d)
- 2.5.4 Letter Agreement, dated March 30, 2010 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to establish a restricted ADS series.(i)
- 2.5.5 Letter Agreement, dated March 15, 2011 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to deposit CPOs upon conversion of the 3.25% Subordinated Convertible Notes due 2016 and 3.75% Subordinated Convertible Notes due 2018, and the Depositary is to issue ADSs upon deposit of such CPOs.(i)
- 2.5.6 Letter Agreement, dated March 15, 2011 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to establish a restricted ADS series.(i)
- 2.5.7 Letter Agreement, dated February 11, 2015 by and between CEMEX, S.A.B. de C.V. and Citibank, N.A., as Depositary, supplementing the Second Amended and Restated Deposit Agreement, as amended, to set forth the terms upon which CEMEX, S.A.B. de C.V. is to establish a restricted ADS series.(i)

- 2.6 Form of American Depositary Receipt evidencing American Depositary Shares.(k)
- 4.1 Note Indenture, dated as of December 18, 2006, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$350,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.1.1 First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$350,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.1.2 Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 5 Capital (SPV) Limited and C5 Capital (SPV) Limited., supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$350,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.2 Note Indenture, dated as of December 18, 2006, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$900,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.2.1 First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$900,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.2.2 Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 10 Capital (SPV) Limited and C10 Capital (SPV) Limited., supplementing the Note Indenture, dated as of December 18, 2006, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$900,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.3 Note Indenture, dated as of February 12, 2007, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$750,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)

- 4.3.1 First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$750,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.3.2 Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap 8 Capital (SPV) Limited and 8 Capital (SPV) Limited., supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S.\$750,000,000 aggregate principal amount of Callable Perpetual Dual-Currency Notes.(d)
- 4.4 Note Indenture, dated as of May 9, 2007, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S. €730,000,000 Callable Perpetual Dual-Currency Notes.(d)
- 4.4.1 First Supplemental Note Indenture, dated as of August 10, 2009, by and among New Sunward Holding Financial Ventures B.V., as issuer, and CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., and New Sunward Holding B.V., as guarantors and the Bank of New York, as trustee, supplementing the Note Indenture, dated as of May 9, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S. €730,000,000 Callable Perpetual Dual-Currency Notes.(d)
- 4.4.2 Second Supplemental Note Indenture, dated as of May 12, 2010, by and among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, The Bank of New York Mellon, as trustee, Swap C10-EUR Capital (SPV) Limited and C10-EUR Capital (SPV) Limited., supplementing the Note Indenture, dated as of February 12, 2007, among New Sunward Holding Financial Ventures B.V., as issuer, CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V. and New Sunward Holding B.V., as guarantors, and The Bank of New York Mellon, as trustee, relating to New Sunward Holding Financial Ventures B.V.'s U.S. €730,000,000 Callable Perpetual Dual-Currency Notes.(d)
- 4.5 Indenture, dated as of December 10, 2009, by and among CEMEX, S.A.B. de C.V., as issuer, Banco Mercantil del Norte, Sociedad Anónima, Institución de Banca Múltiple, Grupo Financiero Banorte, as common representative and calculation agent, in connection with the issuance of Mandatory Convertible Bonds.(d)
- 4.6 Master Terms and Conditions Agreement, dated March 9, 2011, by and between BNP Paribas and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of 3.75% Convertible Subordinated Notes due 2018.(e)
- 4.7 Master Terms and Conditions Agreement, dated March 9, 2011, by and between Bank of America, N.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of 3.25% Convertible Subordinated Notes due 2016 and 3.75% Convertible Subordinated Notes due 2018.(e)

- 4.8 Master Terms and Conditions Agreement, dated March 9, 2011, by and between Banco Santander, S.A. and CEMEX, S.A.B. de C.V., relating to the capped call transaction entered into in connection with issuance by CEMEX, S.A.B. de C.V. of 3.25% Convertible Subordinated Notes due 2016 and 3.75% Convertible Subordinated Notes due 2018.(e)
- 4.9 Indenture, dated as of March 15, 2011, CEMEX, S.A.B. de C.V., as issuer, The Bank of New York Mellon, as trustee, and The Bank of New York Mellon S.A., Institución de Banca Múltiple, as Mexican trustee, in connection with the issuance of U.S.\$690,000,000 aggregate principal amount of 3.75% Convertible Subordinated Notes due 2018.(i)
- 4.10 Amendment and Restatement Agreement, dated July 23, 2015, by and among CEMEX, S.A.B. de C.V. and certain of its subsidiaries, the Intra-Group Lenders (as named therein), Citibank International Ltd (formerly Citibank International plc), as Facilities Agent, and Wilmington Trust (London) Limited, acting as Security Agent, relating to the Intercreditor Agreement dated September 17, 2012 and amended October 31, 2014.(k)
- 4.11 Dutch law Share Pledge over the registered shares in New Sunward Holding B.V., dated September 17, 2012, between (i) CEMEX International Finance Company Ltd. (formerly CEMEX International Finance Company) which merged into New Sunward Holding B.V., (ii) Corporación Gouda S.A. de C.V. and Mexcement Holdings, S.A. de C.V., both which merged into CEMEX Operaciones México, S.A. de C.V. and CEMEX TRADEMARKS HOLDING Ltd., as Pledgors, and Wilmington Trust (London) Limited, as Pledgee.(g)
- 4.11.1 Dutch law Share Pledge over the registered shares in New Sunward Holding B.V., dated December 15, 2015, between (i) CEMEX Operaciones México, S.A. de C.V., as Pledgor, and Wilmington Trust (London) Limited, as Pledgee.(k)
- 4.12 Swiss law Share Pledge over 1,938,958,014 shares in CEMEX TRADEMARKS HOLDING Ltd., dated September 17, 2012, between CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., Interamerican Investments Inc. and Empresas Tolteca de México, S.A. de C.V., as Pledgors, and Wilmington Trust (London) Limited, as Pledgee.(g)
- 4.12.1 Security confirmation agreement of Swiss law Share Pledge over 1,938,958,014 shares in CEMEX TRADEMARKS HOLDING Ltd., dated July 23, 2015, between CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., Interamerican Investments Inc. and Empresas Tolteca de México, S.A. de C.V., as Pledgors, and Wilmington Trust (London) Limited, as Pledgee.(k)
- 4.12.2 Security confirmation agreement of Swiss law Share Pledge over 1,938,958,014 shares in CEMEX TRADEMARKS HOLDING Ltd., dated March 17, 2016, between CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., Interamerican Investments Inc. and Empresas Tolteca de México, S.A. de C.V., as Pledgors, and Wilmington Trust (London) Limited, as Pledgee.(k)
- 4.13 Spanish law Share Pledge over the shares in CEMEX España, S.A., dated November 8, 2012, between New Sunward Holding B.V., CEMEX, S.A.B. de C.V., CEMEX España, S.A. and Wilmington Trust (London) Limited (as Security Agent).(g)
- 4.14 Ratification and Extension deed to Spanish law Share Pledge over the shares in CEMEX España, S.A., dated July 28, 2016, between New Sunward Holding B.V., CEMEX, S.A.B. de C.V., CEMEX España, S.A. and Wilmington Trust (London) Limited (as Security Agent).(1)
- 4.15 English translation of the Amendment and Restatement Agreement of the Mexican law Security Trust Agreement, dated July 29, 2015, entered into by CEMEX, S.A.B. de C.V., Empresas Tolteca de Mexico, S.A. de C.V., Impra Café S.A. de C.V., Interamerican Investments Inc., Cemex México, S.A. de C.V., and CEMEX Operaciones México, S.A. de C.V. (formerly Centro Distribuidor de Cemento, S.A. de C.V.), regarding the shares that each of them owned in: CEMEX México, S.A. de C.V. and CEMEX Operaciones México, S.A. de C.V.(k)

- 4.16 Amendment and Restatement Agreement, dated March 17, 2016, among CEMEX, S.A.B. de C.V. and certain of its subsidiaries, with the financial institutions named therein as Original Lenders and Citibank Europe PLC, UK Branch (formerly Citibank International plc) acting as Agent and Wilmington Trust (London) Limited acting as Security Agent, relating to the Facilities Agreement, dated September 29, 2014, as amended and restated on July 23, 2015.(k)
- 4.17 Amendment and Restatement Agreement, dated November 21, 2016, among CEMEX, S.A.B. de C.V. and certain of its subsidiaries, with the financial institutions named therein as Original Lenders and Citibank Europe PLC, UK Branch (formerly Citibank International plc) acting as Agent and Wilmington Trust (London) Limited acting as Security Agent, relating to the Facilities Agreement, dated September 29, 2014, as amended and restated on July 23, 2015, March 17, 2016, June 23, 2016 and July 11, 2016.(1)
- 4.18 Indenture, dated as of October 12, 2012, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$1,500,000,000 aggregate principal amount of 9.375% Senior Secured Notes due 2022.(g)
- 4.18.1 Supplemental Indenture No. 1, dated as of June 6, 2013, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 9.375% Senior Secured Notes due 2022.(h)
- 4.19 Indenture, dated as of August 12, 2013, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$1,000,000,000 aggregate principal amount of 6.500% Senior Secured Notes due 2019.(h)
- 4.19.1 Supplemental Indenture No. 1, dated as of April 1, 2014, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 6.500% Senior Secured Notes due 2019.(h)
- 4.20 English translation of Accession Deed, dated August 12, 2013, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1,000,000,000 aggregate principal amount of 6.500% Senior Secured Notes due 2019.(h)
- 4.21 Indenture, dated as of October 2, 2013, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$1,000,000,000 aggregate principal amount of 7.250% Senior Secured Notes due 2021.(h)
- 4.21.1 Supplemental Indenture No. 1, dated as of April 1, 2014, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its 7.250% Senior Secured Notes due 2021.(h)
- 4.22 English translation of Accession Deed, dated as of October 2, 2013, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1,000,000,000 aggregate principal amount of 7.250% Senior Secured Notes due 2021.(h)
- 4.23 Indenture, dated as of October 2, 2013, among CEMEX, S.A.B. de C.V, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$500,000,000 aggregate principal amount of Floating Rate Senior Secured Notes due 2018.(h)
- 4.23.1 Supplemental Indenture No. 1, dated as of April 1, 2014, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, relating to its Floating Rate Senior Secured Notes due 2018.(h)
- 4.24 English Translation of Accession Deed, dated October 2, 2013, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$500,000,000 aggregate principal amount of Floating Rate Senior Secured Notes due 2018.(h)

- 4.25 Indenture, dated as of April 1, 2014, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$1,000,000,000 aggregate principal amount of 6.000% U.S. Dollar-Denominated Senior Secured Notes due 2024.(h)
- 4.26 English Translation of Accession Deed, dated April 1, 2014, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX Finance LLC of U.S.\$1,000,000,000 aggregate principal amount of 6.000% U.S. Dollar-Denominated Senior Secured Notes due 2024.(h)
- 4.27 Indenture, dated as of April 1, 2014, among CEMEX Finance LLC, as issuer, the Note Guarantors party thereto, The Bank of New York Mellon, as trustee, and The Bank of New York Mellon, London Branch, as paying agent and transfer agent, in connection with the issuance of €400,000,000 aggregate principal amount of 5.250% Euro-Denominated Senior Secured Notes due 2021.(h)
- 4.28 English Translation of Accession Deed, dated April 1, 2014, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX Finance LLC of €400,000,000 aggregate principal amount of 5.250% Euro-Denominated Senior Secured Notes due 2021.(h)
- 4.29 Indenture, dated as of September 11, 2014, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto and The Bank of New York Mellon, as trustee, in connection with the issuance of U.S.\$1,100,000,000 aggregate principal amount of 5.700% U.S. Dollar-Denominated Senior Secured Notes due 2025.(j)
- 4.30 English Translation of Accession Deed, dated September 11, 2014, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1,100,000,000 aggregate principal amount of 5.700% U.S. Dollar-Denominated Senior Secured Notes due 2025.(j)
- 4.31 Indenture, dated as of September 11, 2014, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto, The Bank of New York Mellon, as trustee, and The Bank of New York Mellon, London Branch, as paying agent and transfer agent, in connection with the issuance of €400,000,000 aggregate principal amount of 4.750% Euro-Denominated Senior Secured Notes due 2022.(j)
- 4.32 English Translation of Accession Deed, dated September 11, 2014, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of €400,000,000 aggregate principal amount of 4.750% Euro-Denominated Senior Secured Notes due 2022.(j)
- 4.33 Indenture, dated as of March 5, 2015, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto, The Bank of New York Mellon, as trustee, registrar, paying agent and transfer agent, in connection with the issuance of U.S.\$750,000,000 aggregate principal amount of 6.125% U.S. Dollar-Denominated Senior Secured Notes due 2025.(j)
- 4.34 English Translation of Accession Deed, dated March 5, 2015, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$750,000,000 aggregate principal amount of 6.125% U.S. Dollar-Denominated Senior Secured Notes due 2025.(j)
- 4.35 Indenture, dated as of March 5, 2015, among CEMEX, S.A.B. de C.V., as issuer, the Note Guarantors party thereto, The Bank of New York Mellon, as trustee and registrar, and The Bank of New York Mellon, London Branch, as paying agent and transfer agent, in connection with the issuance of €550,000,000 aggregate principal amount of 4.375% Euro-Denominated Senior Secured Notes due 2023.(j)

- 4.36 English Translation of Accession Deed, dated March 5, 2015, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of €550,000,000 aggregate principal amount of 4.375% Euro-Denominated Senior Secured Notes due 2023.(j)
- 4.37 Indenture, dated as of March 13, 2015, among CEMEX, S.A.B. de C.V., as issuer, The Bank of New York Mellon, as trustee, CIBanco S.A., Institución de Banca Múltiple, as Mexican trustee, in connection with the issuance of \$200,000,000 aggregate principal amount of 3.72% Convertible Subordinated Notes due 2020.(j)
- 4.38 Indenture, dated as of May 28, 2015, among CEMEX, S.A.B. de C.V. as issuer, The Bank of New York Mellon, as trustee, and CIBanco S.A., Institución de Banca Múltiple, as Mexican trustee, with respect to the issuance of 3.72% Convertible Subordinated Notes due 2020.(k)
- 4.39 Note Indenture, dated as of March 16, 2016, among CEMEX, S.A.B. de C.V., the guarantors listed therein, and The Bank of New York Mellon, as trustee, with respect to the issuance of 7.750% Senior Secured Notes due 2026.(k)
- 4.40 English Translation of Accession Deed, dated March 16, 2016, issued by The Bank of New York Mellon, as Trustee, and CEMEX España, S.A., concerning the shares of CEMEX España, S.A. relating to the issuance by CEMEX, S.A.B. de C.V. of U.S.\$1,000,000,000 aggregate principal amount of 7.750% Senior Secured Notes due 2026.(k)
- 4.41 Indenture, dated as of June 14, 2016, among CEMEX Finance LLC, the guarantors listed therein, The Bank of New York Mellon, as trustee, and The Bank of New York Mellon, London Branch, as paying agent and transfer agent, with respect to the issuance of 4.625% Senior Secured Notes due 2024.(1)
- 8.1 List of subsidiaries of CEMEX, S.A.B. de C.V.(1)
- 12.1 Certification of the Principal Executive Officer of CEMEX, S.A.B. de C.V. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(l)
- 12.2 Certification of the Principal Financial Officer of CEMEX, S.A.B. de C.V. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(1)
- 13.1 Certification of the Principal Executive and Financial Officers of CEMEX, S.A.B. de C.V. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(1)
- 14.1 Consent of KPMG Cárdenas Dosal, S.C. to the incorporation by reference into the effective registration statements of CEMEX, S.A.B. de C.V. under the Securities Act of their report with respect to the consolidated financial statements of CEMEX, S.A.B. de C.V., which appears in this annual report.(1)
- 15.1 Mine safety and health administration safety data.(1)
- (a) Incorporated by reference to Form 6-K of CEMEX, S.A.B. de C.V., filed with the SEC on March 27, 2015.
- (b) Incorporated by reference to the Registration Statement on Form F-4 of CEMEX, S.A.B. de C.V. (Registration No. 333-10682), filed with the SEC on August 10, 1999.
- (c) Incorporated by reference to the 2002 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 8, 2003.
- (d) Incorporated by reference to the 2009 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on June 30, 2010.
- (e) Incorporated by reference to the 2010 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on June 16, 2011.
- (f) Incorporated by reference to the 2011 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 30, 2012.
- (g) Incorporated by reference to the 2012 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 23, 2013.

- (h) Incorporated by reference to the 2013 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 28, 2014.
- (i) Incorporated by reference to the Registration Statement on Form F-6 of CEMEX, S.A.B. de C.V. (Registration No. 333-174743), filed with the SEC on June 6, 2011.
- (j) Incorporated by reference to the 2014 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 27, 2015.
- (k) Incorporated by reference to the 2015 annual report on Form 20-F of CEMEX, S.A.B. de C.V. filed with the SEC on April 22, 2016.
- (l) Filed herewith.

In reviewing the agreements included as exhibits to this annual report, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about us or the other parties to the agreements.

The agreements may contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time.

## **SIGNATURES**

CEMEX, S.A.B. de C.V. hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

CEMEX, S.A.B. de C.V.

By: /s/ Fernando Ángel González Olivieri

Name: Fernando Ángel González Olivieri

Title: Chief Executive Officer

Date: April 28, 2017

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## **Consolidated Statements of Operations**

 $(Millions\ of\ Mexican\ pesos,\ except\ for\ earnings\ (loss)\ per\ share)$ 

		_	Years ended December 31,			
	Note		2016	2015	2014	
Net sales	3	Ps	250,909	220,326	199,942	
Cost of sales	<b>2P</b>	(	(161,883)	(146,068)	(134,742)	
Gross profit			89,026	74,258	65,200	
Operating expenses	5	_	(53,762)	(47,769)	(43,347)	
Operating earnings before other expenses, net	<b>2A</b>		35,264	26,489	21,853	
Other expenses, net	6		(1,646)	(3,043)	(5,045)	
Operating earnings			33,618	23,446	16,808	
Financial expense	16		(21,468)	(19,767)	(21,483)	
Other financial income (expense), net	7		4,441	(1,235)	2,531	
Share of profit of equity accounted investees	13A	_	688	738	294	
Earnings (loss) before income tax			17,279	3,182	(1,850)	
Income tax	19	_	(3,096)	(2,328)	(3,920)	
Net income (loss) from continuing operations			14,183	854	(5,770)	
Discontinued operations	<b>4A</b>		1,024	1,279	90	
CONSOLIDATED NET INCOME (LOSS)			15,207	2,133	(5,680)	
Non-controlling interest net income		_	1,174	932	1,103	
CONTROLLING INTEREST NET INCOME (LOSS)		Ps	14,033	1,201	(6,783)	
Basic earnings (loss) per share	22	Ps	0.33	0.03	(0.16)	
Basic earnings (loss) per share from continuing operations	22	Ps	0.31	_	(0.16)	
Diluted earnings (loss) per share	22	Ps	0.33	0.03	(0.16)	
Diluted earnings (loss) per share from continuing						
operations	22	Ps	0.31	_	(0.16)	

# Consolidated Statements of Comprehensive Income (Loss) (Millions of Mexican pesos)

		Years ended December 3		
	Notes	2016	2015	2014
CONSOLIDATED NET INCOME (LOSS)		Ps <b>15,207</b>	2,133	(5,680)
plans	18	(4,019)	(748)	(3,025)
Income tax recognized directly in other comprehensive income	19	788	183	486
		(3,231)	(565)	(2,539)
Items that are or may be reclassified subsequently to profit or				
loss				
instruments designated as cash flow hedges	13B, 16D	36	335	(94)
Currency translation of foreign subsidiaries	20B	11,629	7,967	501
Income tax recognized directly in other comprehensive income	19	(696)	453	(85)
		10,969	8,755	322
Total items of other comprehensive income (loss)		7,738	8,190	(2,217)
TOTAL COMPREHENSIVE INCOME (LOSS)		<b>22,945</b> 5,164	<b>10,323</b> 3,221	( <b>7,897</b> ) 2,129
CONTROLLING INTEREST COMPREHENSIVE INCOME (LOSS)		Ps <b>17,781</b>	7,102	(10,026)
Out of which: COMPREHENSIVE INCOME (LOSS) FROM				
DISCONTINUED OPERATIONS		Ps <b>1,965</b>	1,352	721
CONTINUING OPERATIONS		Ps <b>15,816</b>	5,750	(10,747)

## **Consolidated Balance Sheets**

(Millions of Mexican pesos)

(Indiana of Internet Person)			
		Decem	ber 31,
	Note	2016	2015
ASSETS			
CURRENT ASSETS			
	0	D <sub>2</sub> 11 555	15 200
Cash and cash equivalents	8	Ps 11,555	15,280
Trade accounts receivables, net	9	29,949	27,774
Other accounts receivable	10	5,179	4,817
Inventories	11	17,862	17,716
Assets held for sale	12A	25,193	5,391
Other current assets	12B	2,292	2,687
Total current assets		92,030	73,665
NON-CURRENT ASSETS			
Equity accounted investees	13A	10,484	12,150
Other investments and non-current accounts receivable	13B	7,049	6,549
Property, machinery and equipment, net	14	227,111	214,133
Goodwill and intangible assets, net	15	247,020	220,318
Deferred income taxes	19B	16,034	15,449
Total non-current assets		507,698	468,599
TOTAL ASSETS		Ps <b>599,728</b>	542,264
LIABILITIES AND STOCKHOLDERS' EQUITY			
CURRENT LIABILITIES			
Short-term debt	16A	Ps 1,216	218
Other financial obligations	16B	11,658	15,587
Trade payables		39,903	28,709
Income tax payable		5,421	6,619
Other current liabilities	17	22,452	20,769
Liabilities directly related to assets held for sale	12A	1,466	673
Total current liabilities		82,116	72,575
NON-CURRENT LIABILITIES			
Long-term debt	16A	235,016	229,125
Other financial obligations	16B	25,972	23,268
Employee benefits	10D 18	23,365	18,269
Deferred income taxes	19B		
	19D 17	19,594	20,385
Other non-current liabilities	1/	16,940	14,874
Total non-current liabilities		320,887	305,921
TOTAL LIABILITIES		403,003	378,496
STOCKHOLDERS' EQUITY			
Controlling interest:			
Common stock and additional paid-in capital	<b>20A</b>	127,336	119,624
Other equity reserves	20B	24,793	15,273
Retained earnings	20C	1,612	7,381
Net income		14,033	1,201
Total controlling interest		167,774	143,479
Non-controlling interest and perpetual debentures	20D	28,951	20,289
	2017		
TOTAL STOCKHOLDERS' EQUITY		196,725	163,768
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		Ps <b>599,728</b>	542,264

## **Consolidated Statements of Cash Flows**

(Millions of Mexican pesos)

		Years ended Decemb		nber 31,
	Notes	2016	2015	2014
OPERATING ACTIVITIES				
Consolidated net income (loss)		Ps <b>15,207</b>	2,133	(5,680)
Discontinued operations		1,024	1,279	90
Net income (loss) from continuing operations		Ps <b>14,183</b>	854	(5,770)
Non-cash items:		,		(-))
Depreciation and amortization of assets	5	16,147	14,865	13,703
Impairment losses and remeasurement of assets held for sale	6	2,516	1,526	3,848
Share of profit of equity accounted investees	13A	(688)	(738)	(294)
Results on sale of subsidiaries, other disposal groups and others		(2,116)	(194)	(389)
Financial items, net	10	17,027	21,002	18,952
Income taxes  Changes in working capital, excluding income taxes	19	3,096	2,328	3,920
		11,023	3,541	1,475
Net cash flow provided by operating activities from continuing operations before		(1.100	42.104	25.445
interest, coupons on perpetual debentures and income taxes		61,188	43,184	35,445
Financial expense and coupons on perpetual debentures paid	20D	(18,129)	(17,865)	(16,844)
Income taxes paid		(5,183)	(7,437)	(7,678)
Net cash flow provided by operating activities from continuing operations		37,876	17,882	10,923
Net cash flow provided by operating activities from discontinued operations		1,194	1,213	1,069
Net cash flows provided by operating activities		39,070	19,095	11,992
INVESTING ACTIVITIES				
Property, machinery and equipment, net	14	(4,500)	(8,872)	(5,965)
Disposal of subsidiaries and other disposal groups, net	4A, 12A	1,424	2,722	167
Intangible assets and other deferred charges	15	(1,427)	(908)	(902)
Long term assets and others, net		(899)	(766)	199
Net cash flows used in investing activities from continuing operations		(5,402)	(7,824)	(6,501)
Net cash flows provided by (used in) investing activities from discontinued		(-, -,	( )- /	(-)/
operations		2	(153)	(161)
Net cash flows used in investing activities		(5,400)	(7,977)	(6,662)
FINANCING ACTIVITIES				
Sale of non-controlling interests in subsidiaries	20D	9,777	_	_
Derivative instruments	200	399	1,098	1,561
Repayment of debt, net	16A	(37,050)	(11,473)	(6,714)
Other financial obligations, net	16B	(9,773)	177	(4,396)
Securitization of trade receivables		(999)	(506)	2,052
Non-current liabilities, net		(1,972)	(1,763)	(1,128)
Net cash flows used in financing activities		(39,618)	(12,467)	(8,625)
Decrease in cash and cash equivalents from continuing operations		(7,144)	(2,409)	(4,203)
Increase in cash and cash equivalents from discontinued operations		1,196	1,060	908
Cash conversion effect, net		2,223	4,040	708
Cash and cash equivalents at beginning of year		15,280	12,589	15,176
CASH AND CASH EQUIVALENTS AT END OF YEAR	8	Ps 11,555	15,280	12,589
Changes in working capital, excluding income taxes:				
Trade receivables, net		Ps (4,353)	(3,384)	(3,348)
Other accounts receivable and other assets		(276)	(1,961)	1,255
Inventories		(1,174)	(1,299)	(2,716)
Trade payables		13,619	7,207	3,807
Other accounts payable and accrued expenses		3,207	2,978	2,477
Changes in working capital, excluding income taxes		Ps 11,023	3,541	1,475

## CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Statements of Changes in Stockholders' Equity (Millions of Mexican pesos)

	Notes		Common stock	Additional paid-in Capital	equity	Retained earnings	Total controlling interest	Non-controlling interest	Total stockholders' equity
Balance as of									
December 31, 2013		Ps	4,143	84,800	15,037	29,399	133,379	14,939	148,318
Net loss			_	_	_	(6,783)	(6,783)	1,103	(5,680)
Total other items of									
comprehensive loss					(3,243)		(3,243)	1,026	(2,217)
Effects of early conversion									
of convertible									
subordinated notes	16B		4	8,037	(601)	_	7,440	_	7,440
Capitalization of retained									
earnings	<b>20A</b>		4	7,614	_	(7,618)	_	_	_
Share-based									
compensation	20A, 21		_	765	(35)		730	_	730
Effects of perpetual									
debentures	<b>20D</b>				(420)		(420)		(420)
Balance as of									
<b>December 31, 2014</b>			4,151	101,216	10,738	14,998	131,103	17,068	148,171
Net income			_	_	_	1,201	1,201	932	2,133
Total other items of									
comprehensive income					5,901		5,901	2,289	8,190
Effects of early conversion									
and issuance of									
convertible subordinated									
notes	16B		3	5,982	(934)	_	5,051	_	5,051
Capitalization of retained									
earnings	20A		4	7,613	_	(7,617)	_		_
Share-based									
compensation	20A, 21		_	655	_	_	655	_	655
Effects of perpetual									
debentures	<b>20D</b>		_	_	(432)	_	(432)		(432)
Balance as of									
December 31, 2015			4,158	115,466	15.273	8,582	143,479	20,289	163,768
Net income			_	_	_	14,033	14,033	1,174	15,207
Total other items of						,	,	,	,
comprehensive income			_	_	3,748		3,748	3,990	7,738
Capitalization of retained					,		ŕ	•	ŕ
earnings	20A		4	6,966	_	(6,970)	_	_	_
Share-based									
compensation	20A, 21			742			742	_	742
Effects of perpetual									
debentures	<b>20D</b>		_	_	(507)		(507)		(507)
Changes in non-controlling									
interest	<b>20D</b>		_	_	6,279	_	6,279	3,498	9,777
Balance as of									
December 31, 2016		Ps	4,162	123,174	24,793	15,645	167,774	28,951	196,725
		- 0	=-,===		=====	====		=====	== = -,-==

#### 1) DESCRIPTION OF BUSINESS

CEMEX, S.A.B. de C.V., a public stock corporation with variable capital (S.A.B. de C.V.) organized under the laws of the United Mexican States, or Mexico, is a holding company (parent) of entities whose main activities are oriented to the construction industry, through the production, marketing, distribution and sale of cement, ready-mix concrete, aggregates and other construction materials. In addition, in order to facilitate the acquisition of financing and to run its operations in Mexico more efficiently considering that there are efficiency and improvement opportunities; beginning on April 1, 2014, CEMEX, S.A.B. de C.V. integrated and carries out all businesses and operational activities of the cement and aggregates sectors in Mexico. Moreover, beginning on January 1, 2015, CEMEX, S.A.B. de C.V. completed the transition, integrated and carries all operating activities related to the sale of ready-mix concrete in Mexico.

CEMEX, S.A.B. de C.V. was founded in 1906 and was registered in the Public Register of Property and Commerce in Monterrey, N.L., Mexico in 1920 for a period of 99 years. In 2002, this period was extended to the year 2100. The shares of CEMEX, S.A.B. de C.V. are listed on the Mexican Stock Exchange ("MSE") as Ordinary Participation Certificates ("CPOs") under the symbol "CEMEXCPO". Each CPO represents two series "A" shares and one series "B" share of common stock of CEMEX, S.A.B. de C.V. In addition, CEMEX, S.A.B. de C.V.'s shares are listed on the New York Stock Exchange ("NYSE") as *American Depositary Shares* ("ADSs") under the symbol "CX". Each ADS represents ten CPOs.

The terms "CEMEX, S.A.B. de C.V." and/or the "Parent Company" used in these accompanying notes to the financial statements refer to CEMEX, S.A.B. de C.V. without its consolidated subsidiaries. The terms the "Company" or "CEMEX" refer to CEMEX, S.A.B. de C.V. together with its consolidated subsidiaries. The issuance of these consolidated financial statements was authorized by the Board of Directors of CEMEX, S.A.B. de C.V. on February 2, 2017. These financial statements were authorized by the General Ordinary Shareholders' Meeting of CEMEX, S.A.B. de C.V. on March 30, 2017.

#### 2) SIGNIFICANT ACCOUNTING POLICIES

## 2A) BASIS OF PRESENTATION AND DISCLOSURE

The consolidated financial statements as of December 31, 2016 and 2015 and for the years ended December 31, 2016, 2015 and 2014, were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

## Presentation currency and definition of terms

The presentation currency of the consolidated financial statements is the Mexican peso, currency in which the Company reports periodically to the MSE. When reference is made to pesos or "Ps" it means Mexican pesos. The amounts in the financial statements and the accompanying notes are stated in millions, except when references are made to earnings (loss) per share and/or prices per share. When reference is made to "US\$" or "dollars", it means dollars of the United States of America ("United States"). When reference is made to "€" or "euros", it means the currency in circulation in a significant number of European Union ("EU") countries. When it is deemed relevant, certain amounts in foreign currency presented in the notes to the financial statements include between parentheses a convenience translation into dollars and/or into pesos, as applicable. Previously reported convenience translations of prior years are not restated unless the transaction is still outstanding, in which case those are restated using the closing exchange rates as of the reporting date. These translations should not be construed as representations that the amounts in pesos or dollars, as applicable, actually represent those peso or

#### Presentation currency and definition of terms — continued

dollar amounts or could be converted into pesos or dollars at the rate indicated. As of December 31, 2016 and 2015, translations of pesos into dollars and dollars into pesos, were determined for balance sheet amounts using the closing exchange rates of Ps20.72 and Ps17.23 pesos per dollar, respectively, and for statements of operations amounts, using the average exchange rates of Ps18.72, Ps15.98 and Ps13.37 pesos per dollar for 2016, 2015 and 2014, respectively. When the amounts between parentheses are the peso and the dollar, the amounts were determined by translating the euro amount into dollars using the closing exchange rates at year-end and then translating the dollars into pesos as previously described.

Amounts disclosed in the notes in connection with tax or legal proceedings (notes 19D and 24), which are originated in jurisdictions which currencies are different to the peso or the dollar, are presented in dollar equivalents as of the closing of the most recent year presented. Consequently, without any change in the original currency, such dollar amounts will fluctuate over time due to changes in exchange rates.

#### **Statements of operations**

CEMEX includes the line item titled "Operating earnings before other expenses, net" considering that it is a relevant measure for CEMEX's management as explained in note 4C. Under IFRS, the inclusion of certain subtotals such as "Operating earnings before other expenses, net" and the display of the statement of operations vary significantly by industry and company according to specific needs.

The line item "Other expenses, net" in profit or loss consists primarily of revenues and expenses not directly related to CEMEX's main activities, or which are of an unusual and/or non-recurring nature, including impairment losses of long-lived assets, results on disposal of assets and restructuring costs, among others (note 6).

Considering the disposal of entire reportable operating segments, for the years 2016, 2015 and 2014, CEMEX presents in the single line item of discontinued operations, the results of its operations in Bangladesh and Thailand, sold in May 2016; for the years 2015 and 2014, the results of its operations in Austria and Hungary, sold in October 2015; for the years 2016, 2015 and 2014, the results of its operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, as well as the results of its Concrete Pipe Business operations in the United States, expected to be sold in the short-term subject to the authorization of the respective authorities (note 4A). As a result, the statements of operations of 2015 and 2014 originally reported were restated. Discontinued operations are presented net of income tax.

## Statements of comprehensive income (loss)

The statements of comprehensive income (loss) for 2015 and 2014 were restated in order to give effect to the discontinued operations mentioned above.

## Statements of cash flows

The statements of cash flows for 2015 and 2014 were restated in order to give effect to the discontinued operations mentioned above. The statements of cash flows exclude the following transactions that did not represent sources or uses of cash:

• In 2016, 2015 and 2014, the increases in common stock and additional paid-in capital associated with: (i) the capitalization of retained earnings for Ps6,970, Ps7,617 and Ps7,618, respectively (note 20A); and (ii) CPOs issued as part of the executive share-based compensation programs for Ps742, Ps655 and Ps765, respectively (note 20A);

#### Statements of cash flows — continued

- In 2016, 2015 and 2014, the increases in property, plant and equipment for approximately Ps7, Ps63 and Ps108, respectively, associated with the negotiation of capital leases during the year (note 14);
- In 2016, the increase in debt and in other current accounts receivable for approximately Ps148, in connection with a guarantee signed by CEMEX Colombia, S.A. ("CEMEX Colombia") over the debt of a trust committed to the development of housing projects in Colombia and the related beneficial interest that in turn holds CEMEX Colombia in the assets of such trust, which are comprised by land;
- In 2015, the decrease in debt for Ps4,517, the net decrease in other equity reserves for Ps934, the increase in common stock for Ps3 and the increase in additional paid-in capital for Ps5,982, in connection with the issuance of optional convertible subordinated notes due in 2020, which involved, among others, the exchange and early conversion of optional convertible subordinated notes due in 2016, as well as the issuance of approximately 42 million ADSs (note 16B);
- In 2015, the decrease in other current and non-current liabilities and in deferred tax assets in connection with changes in the tax legislation in Mexico effective as of December 31, 2015 (notes 19C and 19D); and
- In 2014, the decrease in debt for Ps6,483, the decrease in other equity reserves for Ps601, the increase in common stock for Ps4 and the increase in additional paid-in capital for Ps8,037, in connection with several early conversions of optional convertible subordinated notes due in 2015, incurred in different dates during the year (note 16B).

#### 2B) PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include those of CEMEX, S.A.B. de C.V. and those of the entities in which the Parent Company exercises control, including structured entities, by means of which the Parent Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee's relevant activities. Balances and operations between related parties are eliminated in consolidation.

Equity accounted investees are initially recorded at cost, and are subsequently accounted for by the equity method when CEMEX has significant influence, which is generally presumed with a minimum equity interest of 20%, unless it is proven in unusual cases that significant influence is achieved with a lower percentage. The equity method reflects in the financial statements, the investee's original cost and CEMEX's share of the investee's equity and earnings after acquisition. The financial statements of joint ventures, which relate to those arrangements in which CEMEX and other third-party investors have joint control and have rights to the net assets of the arrangements, are recognized under the equity method. During the reported periods, CEMEX did not have joint operations, referring to those cases in which the parties that have joint control of the arrangement have rights over specific assets and obligations for specific liabilities relating to the arrangements. The equity method is discontinued when the carrying amount of the investment, including any long-term interest in the investee or joint venture, is reduced to zero, unless CEMEX has incurred or guaranteed additional obligations of the investee or joint venture.

Other permanent investments where CEMEX holds equity interests of less than 20% and/or there is no significant influence are carried at their historical cost.

## CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

## 2C) USE OF ESTIMATES AND CRITICAL ASSUMPTIONS

The preparation of financial statements in accordance with IFRS requires management to make estimates and assumptions that affect reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements; as well as the reported amounts of revenues and expenses during the period. These assumptions are reviewed on an ongoing basis using available information. Actual results could differ from these estimates. The main items subject to estimates and assumptions by management include, among others, impairment tests of long-lived assets, allowances for doubtful accounts and obsolescence of inventories, recognition of deferred income tax assets, as well as the measurement of financial instruments at fair value, and the assets and liabilities related to employee benefits. Significant judgment is required by management to appropriately assess the amounts of these concepts.

# 2D) FOREIGN CURRENCY TRANSACTIONS AND TRANSLATION OF FOREIGN CURRENCY FINANCIAL STATEMENTS

Transactions denominated in foreign currencies are recorded in the functional currency at the exchange rates prevailing on the dates of their execution. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the balance sheet date, and the resulting foreign exchange fluctuations are recognized in earnings, except for exchange fluctuations arising from: 1) foreign currency indebtedness associated to the acquisition of foreign entities; and 2) fluctuations associated with related parties' balances denominated in foreign currency, which settlement is neither planned nor likely to occur in the foreseeable future and as a result, such balances are of a permanent investment nature. These fluctuations are recorded against "Other equity reserves", as part of the foreign currency translation adjustment (note 20B) until the disposal of the foreign net investment, at which time, the accumulated amount is recycled through the statement of operations as part of the gain or loss on disposal.

The financial statements of foreign subsidiaries, as determined using their respective functional currency, are translated to pesos at the closing exchange rate for balance sheet accounts and at the closing exchange rates of each month within the period for statements of operations accounts. The functional currency is that in which each consolidated entity primarily generates and expends cash. The corresponding translation effect is included within "Other equity reserves" and is presented in the statement of other comprehensive income (loss) for the period as part of the foreign currency translation adjustment (note 20B) until the disposal of the net investment in the foreign subsidiary.

Considering its integrated activities, for purposes of functional currency, the Parent Company is considered to have two divisions, one related with its financial and holding company activities, in which the functional currency is the dollar for all assets, liabilities and transactions associated with these activities, and another division related with the Parent Company's operating activities in Mexico, in which the functional currency is the peso for all assets, liabilities and transactions associated with these activities.

During the reported periods, there were no subsidiaries whose functional currency was the currency of a hyperinflationary economy, which is generally considered to exist when the cumulative inflation rate over the last three years is approaching, or exceeds, 100%. In a hyperinflationary economy, the accounts of the subsidiary's statements of operations should be restated to constant amounts as of the reporting date, in which case, both the balance sheet accounts and profit or loss accounts would be translated to pesos at the closing exchange rates of the year.

## Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Foreign currency transactions and translation of foreign currency financial statements — continued

The most significant closing exchange rates and the approximate average exchange rates for balance sheet accounts and statement of operations accounts as of December 31, 2016, 2015 and 2014, were as follows:

	20	16	20	15	2014		
Currency	Closing	Average	Closing	Average	Closing	Average	
Dollar	20.7200	18.7200	17.2300	15.9800	14.7400	13.3700	
Euro	21.7945	20.6564	18.7181	17.6041	17.8386	17.6306	
British Pound Sterling	25.5361	25.0731	25.4130	24.3638	22.9738	21.9931	
Colombian Peso	0.0069	0.0062	0.0055	0.0058	0.0062	0.0066	
Egyptian Pound	1.1234	1.8261	2.2036	2.0670	2.0584	1.8824	
Philippine Peso	0.4167	0.3927	0.3661	0.3504	0.3296	0.3009	

The financial statements of foreign subsidiaries are initially translated from their functional currencies into dollars and subsequently into pesos. Therefore, the foreign exchange rates presented in the table above between the functional currency and the peso represent the implied exchange rates resulting from this methodology. The peso to U.S. dollar exchange rate used by CEMEX is an average of free market rates available to settle its foreign currency transactions. No significant differences exist, in any case, between the foreign exchange rates used by CEMEX and those exchange rates published by the Mexican Central Bank.

#### **2E) CASH AND CASH EQUIVALENTS (note 8)**

The balance in this caption is comprised of available amounts of cash and cash equivalents, mainly represented by highly-liquid short-term investments, which are easily convertible into known amounts of cash, and which are not subject to significant risks of changes in their values, including overnight investments, which yield fixed returns and have maturities of less than three months from the investment date. These fixed-income investments are recorded at cost plus accrued interest. Accrued interest is included in profit or loss as part of "Other financial income (expense), net".

The amount of cash and cash equivalents in the balance sheet includes restricted cash and investments, comprised of deposits in margin accounts that guarantee certain of CEMEX's obligations, to the extent that the restriction will be lifted in less than three months from the balance sheet date. When the restriction period is greater than three months, such restricted cash and investments are not considered cash equivalents and are included within short-term or long-term "Other accounts receivable", as appropriate. When contracts contain provisions for net settlement, these restricted amounts of cash and cash equivalents are offset against the liabilities that CEMEX has with its counterparties.

## 2F) FINANCIAL INSTRUMENTS

#### Trade accounts receivable and other current accounts receivable (notes 9 and 10)

Instruments under these captions are classified as "loans and receivables" and are recorded at their amortized cost representing the net present value ("NPV") of the consideration receivable or payable as of the transaction date. Due to their short-term nature, CEMEX initially recognizes these receivables at the original invoiced amount less an estimate of doubtful accounts. Allowances for doubtful accounts as well as impairment of other current accounts receivable, are recognized against administrative and selling expenses.

Trade receivables sold under securitization programs, in which CEMEX maintains a residual interest in the trade accounts receivable sold in case of recovery failure, as well as continued involvement in such assets, do not qualify for derecognition and are maintained on the balance sheet.

#### Other investments and non-current receivables (note 13B)

As part of the category of "loans and receivables", non-current accounts receivable, as well as investments classified as held to maturity are initially recognized at their amortized cost. Subsequent changes in NPV are recognized in profit or loss as part of "Other financial income (expense), net".

Investments in financial instruments held for trading, as well as those investments available for sale, are recognized at their estimated fair value, in the first case through profit or loss as part of "Other financial income (expense), net", and in the second case, changes in valuation are recognized as part of "Other comprehensive income (loss) of the period" within "Other equity reserves" until their time of disposition, when all valuation effects accrued in equity are reclassified to "Other financial income (expense), net", in profit or loss. These investments are tested for impairment upon the occurrence of a significant adverse change or at least once a year during the last quarter.

#### Debt and other financial liabilities (notes 16A and 16B)

Bank loans and notes payable are recognized at their amortized cost. Interest accrued on financial instruments is recognized in the balance sheet within "Other accounts payable and accrued expenses" against financial expense. During the reported periods, CEMEX did not have financial liabilities voluntarily recognized at fair value or associated to fair value hedge strategies with derivative financial instruments. Direct costs incurred in debt issuances or borrowings, as well as debt refinancing or non-substantial modifications to debt agreements that did not represent an extinguishment of debt by considering that the holders and the relevant economic terms of the new instrument are not substantially different to the replaced instrument, adjust the carrying amount of related debt are amortized as interest expense as part of the effective interest rate of each transaction over its maturity. These costs include commissions and professional fees. Costs incurred in the extinguishment of debt, as well as debt refinancing or modifications to debt agreements when the new instrument is substantially different to the old instrument according to a qualitative and quantitative analysis are recognized in profit or loss within "Financial expense" as incurred.

Capital leases are recognized as financing liabilities against a corresponding fixed asset for the lesser of the market value of the leased asset and the NPV of future minimum lease payments, using the contract's implicit interest rate to the extent available, or the incremental borrowing cost. The main factors that determine a capital lease are: a) ownership title of the asset is transferred to CEMEX at the expiration of the contract; b) CEMEX has a bargain purchase option to acquire the asset at the end of the lease term; c) the lease term covers the majority of the useful life of the asset; and/or d) the NPV of minimum payments represents substantially all the fair value of the related asset at the beginning of the lease.

### Financial instruments with components of both liabilities and equity (note 16B)

The financial instrument that contains components of both liability and equity, such as notes convertible into a fixed number of the issuer's shares and denominated its same functional currency, each component is recognized separately in the balance sheet according to the specific characteristics of each transaction. In the case of instruments mandatorily convertible into shares of the issuer, the liability component represents the NPV of interest payments on the principal amount using a market interest rate, without assuming any early conversion, and is recognized within "Other financial obligations", whereas the equity component represents the difference between the principal amount and the liability component, and is recognized within "Other equity reserves", net of commissions. In the case of instruments that are optionally convertible into a fixed number of shares, the liability component represents the difference between the principal amount and the fair value of the conversion option premium, which reflects the equity component (note 2N). When the transaction is denominated in a currency different than the functional currency of the issuer, the conversion option is accounted for as a derivative financial instrument at fair value in the statement of operations.

#### **Derivative financial instruments (note 16D)**

CEMEX recognizes all derivative instruments as assets or liabilities in the balance sheet at their estimated fair values, and the changes in such fair values are recognized in profit or loss within "Other financial income (expense), net" for the period in which they occur, except for the effective portion of changes in fair value of derivative instruments associated with cash flow hedges, in which case, such changes in fair value are recognized in stockholders' equity, and are reclassified to earnings as the interest expense of the related debt is accrued, in the case of interest rate swaps, or when the underlying products are consumed in the case of contracts on the price of raw materials and commodities. Likewise, in hedges of the net investment in foreign subsidiaries, changes in fair value are recognized in stockholders' equity as part of the foreign currency translation result (note 2D), which reversal to earnings would take place upon disposal of the foreign investment. During the reported periods, CEMEX did not designate fair value hedges. Derivative instruments are negotiated with institutions with significant financial capacity; therefore, CEMEX believes the risk of non-performance of the obligations agreed to by such counterparties to be minimal.

CEMEX reviews its different contracts to identify the existence of embedded derivatives. Identified embedded derivatives are analyzed to determine if they need to be separated from the host contract and recognized in the balance sheet as assets or liabilities, applying the same valuation rules used for other derivative instruments.

#### Put options granted for the purchase of non-controlling interests and associates

Represent agreements by means of which a non-controlling interest has the right to sell, at a future date using a predefined price formula or at fair market value, its shares in a subsidiary of CEMEX. When the obligation should be settled in cash or through the delivery of other financial asset, CEMEX recognizes a liability for the NPV of the redemption amount as of the reporting date against the controlling interest within stockholders' equity. A liability is not recognized under these agreements when the redemption amount is determined at fair market value at the exercise date and CEMEX has the election to settle using its own shares.

In respect of a put option granted for the purchase of an associate, CEMEX would recognize a liability against a loss in the statements of operations whenever the estimated purchase price exceeds the fair value of the net assets to be acquired by CEMEX, had the counterparty exercised its right to sell.

#### Fair value measurements (note 16C)

Under IFRS, fair value represents an "Exit Value" which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, considering the counterparty's credit risk in the valuation. The concept of Exit Value is premised on the existence of a market and market participants for the specific asset or liability. When there is no market and/or market participants willing to make a market, IFRS establishes a fair value hierarchy that gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

 Level 1.— represent quoted prices (unadjusted) in active markets for identical assets or liabilities that CEMEX has the ability to access at the measurement date. A quote price in an active market provides the most reliable evidence of fair value and is used without adjustment to measure fair value whenever available.

## CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Fair value measurements — continued

- Level 2.— are inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly, and are used mainly to determine the fair value of securities, investments or loans that are not actively traded. Level 2 inputs included equity prices, certain interest rates and yield curves, implied volatility and credit spreads, among others, as well as inputs extrapolated from other observable inputs. In the absence of Level 1 inputs, CEMEX determined fair values by iteration of the applicable Level 2 inputs, the number of securities and/or the other relevant terms of the contract, as applicable.
- Level 3.— inputs are unobservable inputs for the asset or liability. CEMEX used unobservable inputs to determine fair values, to the extent there are no Level 1 or Level 2 inputs, in valuation models such as Black-Scholes, binomial, discounted cash flows or multiples of Operative EBITDA, including risk assumptions consistent with what market participants would use to arrive at fair value.

#### 2G) INVENTORIES (note 11)

Inventories are valued using the lower of cost or net realizable value. The cost of inventories includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. CEMEX analyzes its inventory balances to determine if, as a result of internal events, such as physical damage, or external events, such as technological changes or market conditions, certain portions of such balances have become obsolete or impaired. When an impairment situation arises, the inventory balance is adjusted to its net realizable value, whereas, if an obsolescence situation occurs, the inventory obsolescence reserve is increased. In both cases, these adjustments are recognized against the results of the period. Advances to suppliers of inventory are presented as part of other current assets.

#### 2H) PROPERTY, MACHINERY AND EQUIPMENT (note 14)

Property, machinery and equipment are recognized at their acquisition or construction cost, as applicable, less accumulated depreciation and accumulated impairment losses. Depreciation of fixed assets is recognized as part of cost and operating expenses (note 5), and is calculated using the straight-line method over the estimated useful lives of the assets, except for mineral reserves, which are depleted using the units-of-production method. As of December 31, 2016, the maximum average useful lives by category of fixed assets were as follows:

	1 cars
Administrative buildings	34
Industrial buildings	32
Machinery and equipment in plant	18
Ready-mix trucks and motor vehicles	7
Office equipment and other assets	6

CEMEX capitalizes, as part of the related cost of fixed assets, interest expense from existing debt during the construction or installation period of significant fixed assets, considering CEMEX's corporate average interest rate and the average balance of investments in process for the period.

All waste removal costs or stripping costs incurred in the operative phase of a surface mine in order to access the mineral reserves are recognized as part of the carrying amount of the related quarries. The capitalized amounts are further amortized over the expected useful life of exposed ore body based on the units of production method.

## Property, machinery and equipment — continued

Costs incurred in respect of operating fixed assets that result in future economic benefits, such as an extension in their useful lives, an increase in their production capacity or in safety, as well as those costs incurred to mitigate or prevent environmental damage, are capitalized as part of the carrying amount of the related assets. The capitalized costs are depreciated over the remaining useful lives of such fixed assets. Periodic maintenance on fixed assets is expensed as incurred. Advances to suppliers of fixed assets are presented as part of other long-term accounts receivable.

The depreciation methods, useful lives and residual values of property, machinery and equipment are reviewed at each reporting date and adjusted if appropriate.

# 2I) BUSINESS COMBINATIONS, GOODWILL, OTHER INTANGIBLE ASSETS AND DEFERRED CHARGES (note 15)

Business combinations are recognized using the purchase method, by allocating the consideration transferred to assume control of the entity to all assets acquired and liabilities assumed, based on their estimated fair values as of the acquisition date. Intangible assets acquired are identified and recognized at fair value. Any unallocated portion of the purchase price represents goodwill, which is not amortized and is subject to periodic impairment tests (note 2J), can be adjusted for any correction to the preliminary assessment given to the assets acquired and/ or liabilities assumed within the twelve-month period after purchase. Costs associated with the acquisition are expensed in profit or loss as incurred.

CEMEX capitalizes intangible assets acquired, as well as costs incurred in the development of intangible assets, when future economic benefits associated are identified and there is evidence of control over such benefits. Intangible assets are presented at their acquisition or development cost. Indefinite life intangible assets are not amortized since the period in which the benefits associated with such intangibles will terminate cannot be accurately established. Definite life intangible assets are amortized on straight-line basis as part of operating costs and expenses (note 5).

Startup costs are recognized in profit or loss as they are incurred. Costs associated with research and development activities ("R&D activities"), performed by CEMEX to create products and services, as well as to develop processes, equipment and methods to optimize operational efficiency and reduce costs are recognized in the operating results as incurred. Direct costs incurred in the development stage of computer software for internal use are capitalized and amortized through the operating results over the useful life of the software, which on average is approximately 5 years.

Costs incurred in exploration activities such as payments for rights to explore, topographical and geological studies, as well as trenching, among other items incurred to assess the technical and commercial feasibility of extracting a mineral resource, which are not significant to CEMEX, are capitalized when future economic benefits associated with such activities are identified. When extraction begins, these costs are amortized during the useful life of the quarry based on the estimated tons of material to be extracted. When future economic benefits are not achieved, any capitalized costs are subject to impairment.

CEMEX's extraction rights have maximum useful lives that range from 30 to 100 years, depending on the sector, and the expected life of the related reserves. As of December 31, 2016, except for extraction rights and/or as otherwise indicated, CEMEX's intangible assets are amortized on a straight line basis over their useful lives that range on average from 3 to 20 years.

#### 2J) IMPAIRMENT OF LONG-LIVED ASSETS (notes 14 and 15)

## Property, machinery and equipment, intangible assets of definite life and other investments

These assets are tested for impairment upon the occurrence of factors such as the occurrence of a significant adverse event, changes in CEMEX's operating environment or in technology, as well as expectations of lower operating results, in order to determine whether their carrying amounts may not be recovered. An impairment loss is recorded in profit or loss for the period within "Other expenses, net", for the excess of the asset's carrying amount over its recoverable amount, corresponding to the higher of the fair value less costs to sell of the asset, and the asset's value in use, the latter represented by the NPV of estimated cash flows related to the use and eventual disposal of the asset. The main assumptions utilized to develop estimates of NPV are a discount rate that reflects the risk of the cash flows associated with the assets and the estimations of generation of future income. Those assumptions are evaluated for reasonableness by comparing such discount rates to available market information and by comparing to third-party expectations of industry growth, such as governmental agencies or industry chambers.

When impairment indicators exist, for each intangible asset, CEMEX determines its projected revenue streams over the estimated useful life of the asset. In order to obtain discounted cash flows attributable to each intangible asset, such revenues are adjusted for operating expenses, changes in working capital and other expenditures, as applicable, and discounted to NPV using the risk adjusted discount rate of return. The most significant economic assumptions are: a) the useful life of the asset; b) the risk adjusted discount rate of return; c) royalty rates; and d) growth rates. Assumptions used for these cash flows are consistent with internal forecasts and industry practices. The fair values of these assets are very sensitive to changes in such significant assumptions. Certain key assumptions are more subjective than others. In respect of trademarks, CEMEX considers that the most subjective key assumption is the royalty rate. In respect of extraction rights and customer relationships, the most subjective assumptions are revenue growth rates and estimated useful lives. CEMEX validates its assumptions through benchmarking with industry practices and the corroboration of third-party valuation advisors. Significant judgment by management is required to appropriately assess the fair values and values in use of the related assets, as well as to determine the appropriate valuation method and select the significant economic assumptions.

## Impairment of long-lived assets — Goodwill

Goodwill is tested for impairment when required due to significant adverse changes or at least once a year, during the last quarter of such year. CEMEX determines the recoverable amount of the group of cash-generating units ("CGUs") to which goodwill balances were allocated, which consists of the higher of such group of CGUs fair value less cost to sell and its value in use, the later represented by the NPV of estimated future cash flows to be generated by such CGUs to which goodwill was allocated, which are generally determined over periods of 5 years. However, in specific circumstances, when CEMEX considers that actual results for a CGU do not fairly reflect historical performance and most external economic variables provide confidence that a reasonably determinable improvement in the mid-term is expected in their operating results, management uses cash flow projections over a period of up to 10 years, to the point in which future expected average performance resembles the historical average performance, to the extent CEMEX has detailed, explicit and reliable financial forecasts and is confident and can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period. If the value in use of a group of CGUs to which goodwill has been allocated is lower than its corresponding carrying amount, CEMEX determines the fair value of such group of CGUs using methodologies generally accepted in the market to determine the value of entities, such as multiples of Operating EBITDA and by reference to other market transactions, among others. An impairment loss is recognized within "Other expenses, net", if the recoverable amount is lower than the net book value of the group of CGUs to which goodwill has been allocated. Impairment charges recognized on goodwill are not reversed in subsequent periods.

#### Impairment of long-lived assets — Goodwill — continued

The geographic operating segments reported by CEMEX (note 4C), represent CEMEX's groups of CGUs to which goodwill has been allocated for purposes of testing goodwill for impairment, considering: a) that after the acquisition, goodwill was allocated at the level of the geographic operating segment; b) that the operating components that comprise the reported segment have similar economic characteristics; c) that the reported segments are used by CEMEX to organize and evaluate its activities in its internal information system; d) the homogeneous nature of the items produced and traded in each operative component, which are all used by the construction industry; e) the vertical integration in the value chain of the products comprising each component; f) the type of clients, which are substantially similar in all components; g) the operative integration among components; and h) that the compensation system of a specific country is based on the consolidated results of the geographic segment and not on the particular results of the components. In addition, the country level represents the lowest level within CEMEX at which goodwill is monitored for internal management purposes.

Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of CEMEX's products, the development of operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets, as well as the discount rates and the growth rates in perpetuity applied. For purposes of estimating future prices, CEMEX uses, to the extent available, historical data plus the expected increase or decrease according to information issued by trusted external sources, such as national construction or cement producer chambers and/or in governmental economic expectations. Operating expenses are normally measured as a constant proportion of revenues, following past experience. However, such operating expenses are also reviewed considering external information sources in respect of inputs that behave according to international prices, such as oil and gas. CEMEX uses specific pre-tax discount rates for each group of CGUs to which goodwill is allocated, which are applied to discount pre-tax cash flows. The amounts of estimated undiscounted cash flows are significantly sensitive to the growth rate in perpetuity applied. Likewise, the amounts of discounted estimated future cash flows are significantly sensitive to the weighted average cost of capital (discount rate) applied. The higher the growth rate in perpetuity applied, the higher the amount of undiscounted future cash flows by group of CGUs obtained. Conversely, the higher the discount rate applied, the lower the amount of discounted estimated future cash flows by group of CGUs obtained.

### **2K) PROVISIONS**

CEMEX recognizes provisions when it has a legal or constructive obligation resulting from past events, whose resolution would imply cash outflows or the delivery of other resources owned by the Company. As of December 31, 2016 and 2015 some significant proceedings that gave rise to a portion of the carrying amount of CEMEX's other current and non-current liabilities and provisions are detailed in note 24A.

Considering guidance under IFRS, CEMEX recognizes provisions for levies imposed by governments until the obligating event or the activity that triggers the payment of the levy has occurred, as defined in the legislation.

## **Restructuring (note 17)**

CEMEX recognizes provisions for restructuring when the restructuring detailed plans have been properly finalized and authorized by management, and have been communicated to the third parties involved and/or affected by the restructuring prior to the balance sheet date. These provisions may include costs not associated with CEMEX's ongoing activities.

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#### Asset retirement obligations (note 17)

Unavoidable obligations, legal or constructive, to restore operating sites upon retirement of long-lived assets at the end of their useful lives are measured at the NPV of estimated future cash flows to be incurred in the restoration process, and are initially recognized against the related assets' book value. The increase to the assets' book value is depreciated during its remaining useful life. The increase in the liability related to adjustments to NPV by the passage of time is charged to the line item "Other financial income (expense), net." Adjustments to the liability for changes in estimations are recognized against fixed assets, and depreciation is modified prospectively. These obligations are related mainly to future costs of demolition, cleaning and reforestation, so that quarries, maritime terminals and other production sites are left in acceptable condition at the end of their operation.

#### Costs related to remediation of the environment (notes 17 and 24)

Provisions associated with environmental damage represent the estimated future cost of remediation, which are recognized at their nominal value when the time schedule for the disbursement is not clear, or when the economic effect for the passage of time is not significant; otherwise, such provisions are recognized at their discounted values. Reimbursements from insurance companies are recognized as assets only when their recovery is practically certain. In that case, such reimbursement assets are not offset against the provision for remediation costs.

#### Contingencies and commitments (notes 23 and 24)

Obligations or losses related to contingencies are recognized as liabilities in the balance sheet only when present obligations exist resulting from past events that are expected to result in an outflow of resources and the amount can be measured reliably. Otherwise, a qualitative disclosure is included in the notes to the financial statements. The effects of long-term commitments established with third parties, such as supply contracts with suppliers or customers, are recognized in the financial statements on an incurred or accrued basis, after taking into consideration the substance of the agreements. Relevant commitments are disclosed in the notes to the financial statements. The Company does not recognize contingent revenues, income or assets, unless their realization is virtually certain.

## 2L) PENSIONS AND OTHER POST-EMPLOYMENT BENEFITS (note 18)

## **Defined contribution pension plans**

The costs of defined contribution pension plans are recognized in the operating results as they are incurred. Liabilities arising from such plans are settled through cash transfers to the employees' retirement accounts, without generating future obligations.

#### Defined benefit pension plans and other post-employment benefits

The costs associated with employees' benefits for: a) defined benefit pension plans; and b) other post-employment benefits, basically comprised of health care benefits, life insurance and seniority premiums, granted by CEMEX and/or pursuant to applicable law, are recognized as services are rendered, based on actuarial estimations of the benefits' present value with the advice of external actuaries. For certain pension plans, CEMEX has created irrevocable trust funds to cover future benefit payments ("plan assets"). These plan assets are valued at their estimated fair value at the balance sheet date. The actuarial assumptions and accounting policy consider: a) the use of nominal rates; b) a single rate is used for the determination of the expected return on plan

#### Defined benefit pension plans and other post-employment benefits — continued

assets and the discount of the benefits obligation to present value; c) a net interest is recognized on the net defined benefit liability (liability minus plan assets); and d) all actuarial gains and losses for the period, related to differences between the projected and real actuarial assumptions at the end of the period, as well as the difference between the expected and real return on plan assets, are recognized as part of "Other comprehensive income or loss" within stockholders' equity.

The service cost, corresponding to the increase in the obligation for additional benefits earned by employees during the period, is recognized within operating costs and expenses. The net interest cost, resulting from the increase in obligations for changes in NPV and the change during the period in the estimated fair value of plan assets, is recognized within "Other financial income (expense), net".

The effects from modifications to the pension plans that affect the cost of past services are recognized within operating costs and expenses over the period in which such modifications become effective to the employees or without delay if changes are effective immediately. Likewise, the effects from curtailments and/or settlements of obligations occurring during the period, associated with events that significantly reduce the cost of future services and/or reduce significantly the population subject to pension benefits, respectively, are recognized within operating costs and expenses.

#### **Termination benefits**

Termination benefits, not associated with a restructuring event, which mainly represent severance payments by law, are recognized in the operating results for the period in which they are incurred.

#### 2M) INCOME TAXES (note 19)

The effects reflected in profit or loss for income taxes include the amounts incurred during the period and the amounts of deferred income taxes, determined according to the income tax law applicable to each subsidiary. Consolidated deferred income taxes represent the addition of the amounts determined in each subsidiary by applying the enacted statutory income tax rate to the total temporary differences resulting from comparing the book and taxable values of assets and liabilities, considering tax assets such as loss carryforwards and other recoverable taxes, to the extent that it is probable that future taxable profits will be available against which they can be utilized. The measurement of deferred income taxes at the reporting period reflects the tax consequences that follow the manner in which CEMEX expects to recover or settle the carrying amount of its assets and liabilities. Deferred income taxes for the period represent the difference between balances of deferred income taxes at the beginning and the end of the period. Deferred income tax assets and liabilities relating to different tax jurisdictions are not offset. According to IFRS, all items charged or credited directly in stockholders' equity or as part of other comprehensive income or loss for the period are recognized net of their current and deferred income tax effects. The effect of a change in enacted statutory tax rates is recognized in the period in which the change is officially enacted.

Deferred tax assets are reviewed at each reporting date and are reduced when it is not deemed probable that the related tax benefit will be realized, considering the aggregate amount of self-determined tax loss carryforwards included in its income tax returns in each country that CEMEX believes, based on available evidence, will not be rejected by the tax authorities; and the likelihood of recovering such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income. If it is probable that the tax authorities would reject a self-determined deferred tax asset, CEMEX would decrease such asset. When it is considered that a

## CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

#### Income taxes — continued

deferred tax asset will not be recovered before its expiration, CEMEX would not recognize such deferred tax asset. Both situations would result in additional income tax expense for the period in which such determination is made. In order to determine whether it is probable that deferred tax assets will ultimately be recovered, CEMEX takes into consideration all available positive and negative evidence, including factors such as market conditions, industry analysis, expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc. Likewise, every reporting period, CEMEX analyzes its actual results versus the Company's estimates, and adjusts, as necessary, its tax asset valuations. If actual results vary from CEMEX's estimates, the deferred tax asset and/or valuations may be affected and necessary adjustments will be made based on relevant information. Any adjustments recorded will affect CEMEX's statements of operations in such period.

The income tax effects from an uncertain tax position are recognized when is probable that the position will be sustained based on its technical merits and assuming that the tax authorities will examine each position and have full knowledge of all relevant information, and they are measured using a cumulative probability model. Each position has been considered on its own, regardless of its relation to any other broader tax settlement. The high probability threshold represents a positive assertion by management that CEMEX is entitled to the economic benefits of a tax position. If a tax position is considered not probable of being sustained, no benefits of the position are recognized. Interest and penalties related to unrecognized tax benefits are recorded as part of the income tax in the consolidated statements of operations.

The effective income tax rate is determined by dividing the line item "Income Tax", in profit or loss within the line item "Earnings (loss) before income tax". This effective tax rate is further reconciled to CEMEX's statutory tax rate applicable in Mexico (note 19C). During 2014, CEMEX has experienced consolidated losses before income tax. In any given period whereas a loss before income tax is reported, the reference statutory tax rate to which CEMEX reconciles its effective income tax rate is shown as a negative percentage. A significant effect in CEMEX's effective tax rate and consequently in the aforementioned reconciliation of CEMEX's effective tax rate, relates to the difference between the statutory income tax rate in Mexico of 30% against the applicable income tax rates of each country where CEMEX operates.

For the years ended December 31, 2016, 2015 and 2014, the statutory tax rates in CEMEX's main operations were as follows:

Country	2016	2015	2014
Mexico	30.0%	30.0%	30.0%
United States	35.0%	35.0%	35.0%
United Kingdom	20.0%	20.3%	21.5%
France	34.4%	38.0%	38.0%
Germany	28.2%	29.8%	29.8%
Spain	25.0%	28.0%	30.0%
Philippines	30.0%	30.0%	30.0%
Colombia	40.0%	39.0%	34.0%
Egypt	22.5%	22.5%	30.0%
Switzerland	9.6%	9.6%	9.6%
Others	7.8% - 39.0%	7.8% - 39.0%	10.0% - 39.0%

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Income taxes — continued

CEMEX's current and deferred income tax amounts included in profit or loss for the period are highly variable, and are subject, among other factors, to taxable income determined in each jurisdiction in which CEMEX operates. Such amounts of taxable income depend on factors such as sale volumes and prices, costs and expenses, exchange rates fluctuations and interest on debt, among others, as well as to the estimated tax assets at the end of the period due to the expected future generation of taxable gains in each jurisdiction.

## 2N) STOCKHOLDERS' EQUITY

### Common stock and additional paid-in capital (note 20A)

These items represent the value of stockholders' contributions, and include increases related to the capitalization of retained earnings and the recognition of executive compensation programs in CEMEX's CPOs as well as decreases associated with the restitution of retained earnings.

## Other equity reserves (note 20B)

Groups the cumulative effects of items and transactions that are, temporarily or permanently, recognized directly to stockholders' equity, and includes the comprehensive income (loss), which reflects certain changes in stockholders' equity that do not result from investments by owners and distributions to owners. The most significant items within "Other equity reserves" during the reported periods are as follows:

## Items of "Other equity reserves" included within other comprehensive income (loss):

- Currency translation effects from the translation of foreign subsidiaries, net of: a) exchange results from foreign currency debt directly related to the acquisition of foreign subsidiaries; and b) exchange results from foreign currency related parties balances that are of a long-term investment nature (note 2D);
- The effective portion of the valuation and liquidation effects from derivative instruments under cash flow hedging relationships, which are recorded temporarily in stockholders' equity (note 2F);
- Changes in fair value during the tenure of available-for-sale investments until their disposal (note 2F); and
- Current and deferred income taxes during the period arising from items whose effects are directly recognized in stockholders' equity.

## Items of "Other equity reserves" not included in comprehensive income (loss):

- Effects related to controlling stockholders' equity for changes or transactions affecting non-controlling interest stockholders in CEMEX's consolidated subsidiaries;
- Effects attributable to controlling stockholders' equity for financial instruments issued by consolidated subsidiaries that qualify for accounting purposes as equity instruments, such as the interest expense paid on perpetual debentures;
- The equity component of securities which are mandatorily or optionally convertible into shares of the Parent Company (notes 2F and 16B). Upon conversion, this amount will be reclassified to common stock and additional paid-in capital; and
- The cancellation of the Parent Company's shares held by consolidated entities.

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Retained earnings (note 20C)

Retained earnings represent the cumulative net results of prior years including the effects generated form initial adoption of IFRS as of January 1, 2010, net of: a) dividends declared; b) capitalization of retained earnings; and c) restitution of retained earnings when applicable.

#### Non-controlling interest and perpetual debentures (note 20D)

This caption includes the share of non-controlling stockholders in the results and equity of consolidated subsidiaries. This caption also includes the nominal amount as of the balance sheet date of financial instruments (perpetual notes) issued by consolidated entities that qualify as equity instruments considering that there is: a) no contractual obligation to deliver cash or another financial asset; b) no predefined maturity date; and c) an unilateral option to defer interest payments or preferred dividends for indeterminate periods.

#### **20) REVENUE RECOGNITION (note 3)**

CEMEX's consolidated net sales represent the value, before tax on sales, of revenues originated by products and services sold by consolidated subsidiaries as a result of their ordinary activities, after the elimination of transactions between related parties, and are quantified at the fair value of the consideration received or receivable, decreased by any trade discounts or volume rebates granted to customers.

Revenue from the sale of goods and services is recognized when goods are delivered or services are rendered to customers, there is no condition or uncertainty implying a reversal thereof, and they have assumed the risk of loss. Revenue from trading activities, in which CEMEX acquires finished goods from a third party and subsequently sells the goods to another third-party, are recognized on a gross basis, considering that CEMEX assumes the total risk on the goods purchased, not acting as agent or broker.

Revenue and costs related to construction contracts are recognized in the period in which the work is performed by reference to the contract's stage of completion at the end of the period, considering that the following have been defined: a) each party's enforceable rights regarding the asset under construction; b) the consideration to be exchanged; c) the manner and terms of settlement; d) actual costs incurred and contract costs required to complete the asset are effectively controlled; and e) it is probable that the economic benefits associated with the contract will flow to the entity.

The stage of completion of construction contracts represents the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs or the surveys of work performed or the physical proportion of the contract work completed, whichever better reflects the percentage of completion under the specific circumstances. Progress payments and advances received from customers do not reflect the work performed and are recognized as a short or long term advanced payments, as appropriate.

## 2P) COST OF SALES AND OPERATING EXPENSES (note 5)

Cost of sales represents the production cost of inventories at the moment of sale. Such cost of sales includes depreciation, amortization and depletion of assets involved in production, expenses related to storage in production plants and freight expenses of raw material in plants and delivery expenses of CEMEX's ready-mix concrete business.

Administrative expenses represent the expenses associated with personnel, services and equipment, including depreciation and amortization, related to managerial activities and back office for the Company's management.

#### Cost of sales and operating expenses — continued

Sales expenses represent the expenses associated with personnel, services and equipment, including depreciation and amortization, involved specifically in sales activities.

Distribution and logistics expenses refer to expenses of storage at points of sales, including depreciation and amortization, as well as freight expenses of finished products between plants and points of sale and freight expenses between points of sales and the customers' facilities.

## 2Q) EXECUTIVE SHARE-BASED COMPENSATION (note 21)

Share-based payments to executives are defined as equity instruments when services received from employees are settled by delivering shares of the Parent Company and/or a subsidiary; or as liability instruments when CEMEX commits to make cash payments to the executives on the exercise date of the awards based on changes in CEMEX's own stock (intrinsic value). The cost of equity instruments represents their estimated fair value at the date of grant and is recognized in profit or loss during the period in which the exercise rights of the employees become vested. In respect of liability instruments, these instruments are valued at their estimated fair value at each reporting date, recognizing the changes in fair value through the operating results. CEMEX determines the estimated fair value of options using the binomial financial option-pricing model.

#### 2R) EMISSION RIGHTS

In certain countries where CEMEX operates, such as EU countries, mechanisms aimed at reducing carbon dioxide emissions ("CO2") have been established by means of which, the relevant environmental authorities have granted certain number of emission rights ("certificates") free of cost to the different industries releasing CO2, which must submit to such environmental authorities at the end of a compliance period, certificates for a volume equivalent to the tons of CO2 released. Companies must obtain additional certificates to meet deficits between actual CO2 emissions during the compliance period and certificates received, or they can dispose of any surplus of certificates in the market. In addition, the United Nations Framework Convention on Climate Change ("UNFCCC") grants Certified Emission Reductions ("CERs") to qualified CO2 emission reduction projects. CERs may be used in specified proportions to settle emission rights obligations in the EU. CEMEX actively participates in the development of projects aimed to reduce CO2 emissions. Some of these projects have been awarded with CERs.

CEMEX does not maintain emission rights, CERs and/or enter into forward transactions with trading purposes. CEMEX accounts for the effects associated with CO2 emission reduction mechanisms as follows:

- Certificates received free of cost are not recognized in the balance sheet. Revenues from the sale of any surplus of certificates are recognized by decreasing cost of sales. In forward sale transactions, revenues are recognized upon physical delivery of the emission certificates.
- Certificates and/or CERs acquired to hedge current CO2 emissions are recognized as intangible assets at
  cost, and are further amortized to cost of sales during the compliance period. In the case of forward
  purchases, assets are recognized upon physical reception of the certificates.
- CEMEX accrues a provision against cost of sales when the estimated annual emissions of CO2 are expected
  to exceed the number of emission rights, net of any benefit obtained through swap transactions of emission
  rights for CERs.
- CERs received from the UNFCCC are recognized as intangible assets at their development cost, which are attributable mainly to legal expenses incurred in the process of obtaining such CERs.

## Emission rights — continued

During 2016, 2015 and 2014, there were no sales of emission rights to third parties. In addition, in certain countries, the environmental authorities impose levies per ton of CO2 or other greenhouse gases released. Such expenses are recognized as part of cost of sales as incurred.

#### 2S) CONCENTRATION OF CREDIT

CEMEX sells its products primarily to distributors in the construction industry, with no specific geographic concentration within the countries in which CEMEX operates. As of and for the years ended December 31, 2016, 2015 and 2014, no single customer individually accounted for a significant amount of the reported amounts of sales or in the balances of trade receivables. In addition, there is no significant concentration of a specific supplier relating to the purchase of raw materials.

#### 2T) NEWLY ISSUED IFRS NOT YET ADOPTED

There are a number of IFRS issued as of the date of issuance of these financial statements but which have not yet been adopted, which are listed below. Except as otherwise indicated, CEMEX expects to adopt these IFRS when they become effective.

IFRS 9, Financial instruments: classification and measurement ("IFRS 9"). IFRS 9 sets forth the guidance relating to the classification and measurement of financial assets and liabilities, to the accounting for expected credit losses on an entity's financial assets and commitments to extend credits, as well as the requirements related to hedge accounting; and will replace IAS 39, Financial instruments: recognition and measurement ("IAS 39") in its entirety. IFRS 9 requires an entity to recognize a financial asset or a financial liability when, and only when, the entity becomes party to the contractual provisions of the instrument. At initial recognition, an entity shall measure a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability, and includes a category of financial assets at fair value through other comprehensive income (loss) for simple debt instruments. In respect to impairment requirements, IFRS 9 eliminates the threshold set forth in IAS 39 for the recognition of credit losses. Under the impairment approach in IFRS 9 it is no longer necessary for a credit event to have occurred before credit losses are recognized, instead, an entity always accounts for expected credit losses, and changes in those expected losses through profit or loss. In respect to hedging activities, the requirements of IFRS 9 align hedge accounting more closely with an entity's risk management through a principles-based approach, by means of which, among other changes; the current range of 0.8 to 1.25 to declare and maintain a hedge is eliminated, and in its place, under IFRS 9, a hedging instrument will be declared only if it supports the entity's risk management strategy. Nonetheless, the IASB provided entities with an accounting policy choice between applying the hedge accounting requirements of IFRS 9 or continuing to apply the existing hedge accounting requirements in IAS 39; until the IASB completes its project on the accounting for macro hedging.

CEMEX is currently evaluating the impact that IFRS 9 will have on the classification and measurement of its financial assets and financial liabilities, impairment of financial assets and hedging activities. Preliminarily: a) CEMEX does not maintain fixed income investments held to maturity; and b) it is considered that the expected loss on trade receivables will replace the current allowance for doubtful accounts. The Company is considering the full adoption of IFRS 9 on January 1, 2018, including hedge accounting. CEMEX does not expect any significant effect in its results from the adoption of IFRS 9. Nonetheless, CEMEX is not considering an early application of IFRS 9.

#### Newly issued ifrs not yet adopted — continued

In May 2014, the IASB issued IFRS 15, Revenue from contracts with customers ("IFRS 15"). Under IFRS 15, an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, following a five step model: Step 1: Identify the contract(s) with a customer, which is an agreement between two or more parties that creates enforceable rights and obligations; Step 2: Identify the performance obligations in the contract, considering that if a contract includes promises to transfer distinct goods or services to a customer, the promises are performance obligations and are accounted for separately; Step 3: Determine the transaction price, which is the amount of consideration in a contract to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer; Step 4: Allocate the transaction price to the performance obligations in the contract, on the basis of the relative stand-alone selling prices of each distinct good or service promised in the contract; and Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation, by transferring a promised good or service to a customer (which is when the customer obtains control of that good or service). A performance obligation may be satisfied at a point in time (typically for promises to transfer goods to a customer) or over time (typically for promises to transfer services to a customer). IFRS 15 also includes disclosure requirements that would provide users of financial statements with comprehensive information about the nature, amount, timing and uncertainty of revenue and cash flows arising from the entity's contracts with customers. IFRS 15 will supersede all existing guidance on revenue recognition. IFRS 15 is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted considering certain additional disclosure requirements.

CEMEX started in 2015 the evaluation of the impact that IFRS 15 will have on its accounting and disclosures related to its revenue. As of the reporting date, CEMEX has analyzed its contracts with customers in all countries in which it operates in order to indentify the several performance obligations and other offerings (discounts, loyalty programs, etc.) included in such contracts, among other aspects, aimed to determine potential differences in the accounting recognition of revenues in respect to current IFRS. In addition, CEMEX has provided training in IFRS 15 to key personnel with the support of external experts and has developed an online training. Preliminarily, considering its assessments at the reporting date, the nature of its business, its main transactions and current accounting policies, the fact that the transaction price is allocated to goods delivered or services rendered to customers when customers have assumed the risk of loss, CEMEX does not expect a significant effect in the timing of its accounting of its revenue from the adoption of IFRS 15. During 2017, CEMEX plans to complete its assessment and quantify any adjustment that would be necessary if certain portion of revenue that currently is being recognized at the transaction date or deferred during time, as applicable, should otherwise be recognized differently upon the adoption of IFRS 15. Beginning January 1, 2018, CEMEX plans to adopt IFRS 15 using the full retrospective approach. CEMEX is not considering the early application of IFRS 15.

• On January 13, 2016, the IASB issued IFRS 16, *Leases* ("IFRS 16"), which will supersede all current standards and interpretations related to lease accounting. IFRS 16, defines leases as any contract or part of a contract that conveys to the lessee the right to use an asset for a period of time in exchange for consideration and the lessee directs the use of the identified asset throughout that period. In summary, IFRS 16 introduces a single lessee accounting model, and requires a lessee to recognize, for all leases with a term of more than 12 months, unless the underlying asset is of low value, assets for the right-of-use the underlying asset against a corresponding financial liability, representing the NPV of estimated lease payments under the contract, with a single income statement model in which a lessee recognizes depreciation of the right-of-use asset and interest on the lease liability. A lessee shall present either in the balance sheet, or disclose in the notes, right-of-use assets separately from other assets, as well as, lease liabilities separately from other liabilities. IFRS 16 is effective beginning January 1, 2019, with early adoption permitted considering certain requirements.

#### Newly issued ifrs not yet adopted — continued

As of the reporting date, CEMEX has performed an assessment of its main outstanding operating and finance lease contracts, in order to inventory the most relevant characteristics of such contracts (type of assets, committed payments, maturity dates, renewal clauses, etc.). During 2017, CEMEX expects to define its future policy under IFRS 16 in connection with the exemption for short-term leases and low value assets in order to set the basis and be able to start quantifying the required adjustments for the proper recognition of the assets for the "right-of-use" and the corresponding financial liability, with a plan to adopt IFRS 16 beginning January 1, 2019 full retrospectively. Preliminarily, based on its assessment as of the reporting date, CEMEX considers that upon adoption of IFRS 16; most of its outstanding operating leases will be recognized on balance sheet increasing assets and liabilities, with no significant initial effect on CEMEX's net assets. CEMEX is not considering the early application of IFRS 16.

• On January 29, 2016, the IASB issued amendments to IAS 7, *Statement of cash flows*, which are effective beginning January 1, 2017. The amendments aim to enable users of financial statements to evaluate changes in liabilities arising from financing activities. To achieve this objective, the IASB requires that the following changes in liabilities arising from financing activities are disclosed (to the extent necessary): (i) changes from financing cash flows; (ii) changes arising from obtaining or losing control of subsidiaries or other businesses; (iii) the effect of changes in foreign exchange rates; (iv) changes in fair values; and (v) other changes. The amendments state that one way to fulfill the new disclosure requirement is to provide a rollforward between the opening and closing balances in the statement of financial position for liabilities arising from financing activities. Finally, the amendments state that changes in liabilities arising from financing activities must be disclosed separately from changes in other assets and liabilities. CEMEX does not expect a significant effect from the adoption of these amendments.

#### 3) REVENUES AND CONSTRUCTION CONTRACTS

For the years ended December 31, 2016, 2015 and 2014, net sales, after sales and eliminations between related parties resulting from consolidation, were as follows:

	2016	2015	2014
Ps	240,379	212,019	192,518
	3,110	2,811	2,618
	7,420	5,496	4,806
Ps	250,909	220,326	199,942
		Ps 240,379 3,110 7,420	, , , , , , , , , , , , , , , , , , , ,

- 1 Includes in each period those revenues generated under construction contracts that are presented in the table below
- 2 Refers mainly to revenues generated by Neoris N.V., a subsidiary involved in providing information technology solutions and services.
- 3 Refers mainly to revenues generated by subsidiaries not individually significant operating in different lines of business.

## Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Revenues and construction contracts — continued

For the years ended December 31, 2016, 2015 and 2014, revenues and costs related to construction contracts in progress were as follows:

	- К	date1	2016	2015	2014
Revenue from construction contracts included in consolidated net sales <sup>2</sup> Costs incurred in construction contracts included in consolidated cost of	Ps	4,066	1,033	994	1,507
sales <sup>3</sup>		(3,185)	(1,133)	<u>(919</u> )	(1,332)
Construction contracts gross operating profit (loss)	Ps	<u>881</u>	<u>(100)</u>		175

- 1 Revenues and costs recognized from inception of the contracts until December 31, 2016 in connection with those projects still in progress.
- 2 Revenues from construction contracts during 2016, 2015 and 2014, determined under the percentage of completion method, were mainly obtained in Mexico and Colombia.
- 3 Refers to actual costs incurred during the periods. The oldest contract in progress as of December 31, 2016 started in 2010.

As of December 31, 2016 and 2015, amounts receivable for progress billings to customers of construction contracts and/or advances received by CEMEX from these customers were not significant.

# 4) DISCONTINUED OPERATIONS, SALE OF OTHER DISPOSAL GROUPS AND SELECTED FINANCIAL INFORMATION BY GEOGRAPHIC OPERATING SEGMENT

## **4A) DISCONTINUED OPERATIONS**

On November 28, 2016, CEMEX announced that one of its subsidiaries in the United States signed a definitive agreement to divest its Concrete Reinforced Pipe Manufacturing Business ("Concrete Pipe Business") in the United States to Quikrete Holdings, Inc. ("Quikrete") for approximately US\$500 plus an additional US\$40 contingent consideration based on future performance. The closing of this transaction is subject to the satisfaction of certain conditions, including approval from regulators. CEMEX currently expects to finalize this sale during the first quarter of 2017. Considering the disposal of the entire concrete pipe division, the operations of the Pipe Business for the years ended December 31, 2016, 2015 and 2014, included in CEMEX's statements of operations were reclassified to the single line item "Discontinued operations". In addition, the balance sheet of CEMEX's Pipe Business as of December 31, 2016 was reclassified to assets held for sale and directly related liabilities on the face of the consolidated balance sheet, including approximately US\$260 (Ps5,369) of goodwill associated to the reporting segment in the United States that was proportionally allocated to these net assets based on their relative fair values (see note 26).

On May 26, 2016, CEMEX closed the sale of its operations in Bangladesh and Thailand to Siam City Cement Public Company Ltd. for approximately US\$70 (Ps1,450), generating a net gain on sale of approximately US\$24 (Ps424) and included in the statement of operations in 2016 within the line item "Discontinued operations", which includes the reclassification of foreign currency translation gains associated with these operations accrued in equity until disposal for approximately US\$7 (Ps122).

With effective date October 31, 2015, after all agreed upon conditions precedent were satisfied, CEMEX completed the process for the sale of its operations in Austria and Hungary that started on August 12, 2015 to the

## CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

#### Discontinued operations — continued

Rohrdorfer Group for approximately €165 (US\$179 or Ps3,090), after final adjustments negotiated for changes in cash and working capital balances as of the transfer date. The combined operations in Austria and Hungary consisted of 29 aggregate quarries and 68 ready-mix plants. The operations in Austria and Hungary for the ten-month period ended October 31, 2015 and the year ended December 31, 2014, included in CEMEX's statements of operations, were reclassified to the single line item "Discontinued operations", which includes, in 2015, a gain on sale of approximately US\$45 (Ps741). Such gain on sale includes the reclassification to the statement of operations of foreign currency translation gains accrued in equity until October 31, 2015 for an amount of approximately US\$10 (Ps215).

In addition, on August 12, 2015, CEMEX agreed with Duna-Dráva Cement, the sale of its Croatia operations, including assets in Bosnia and Herzegovina, Montenegro and Serbia, for approximately €231 (US\$243 or Ps5,032), amount that is subject to final adjustments negotiated for changes in cash and working capital balances as of the change of control date. The operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. As of December 31, 2016, after the compliance of customary conditions precedent agreed by the parties, the closing of this transaction is still subject to approval from the relevant authorities. CEMEX expects to conclude the sale of its operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, in the short-term. The operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, for the years ended December 31, 2016, 2015 and 2014, included in CEMEX's statements of operations were reclassified, to the single line item "Discontinued operations".

The following table presents condensed combined information of the statement of operations of CEMEX's discontinued operations in Bangladesh and Thailand for the five-months period ended May 31, 2016 and for the years ended December 31, 2015 and 2014, in Austria and Hungary for the ten-months period ended October 31, 2015 and for the year ended December 31, 2014; as well as of CEMEX's operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, and the Pipe Business in the United States for the years ended December 31, 2016, 2015 and 2014:

		2016	2015	2014
Sales	Ps	8,016	10,861	10,081
Cost of sales and operating expenses		(7,198)	(10,251)	(9,750)
Other products (expenses), net		(15)	33	(83)
Financial expenses, net and others		(25)	(65)	(55)
Earnings before income tax		778	578	193
Income tax		(130)	(34)	_(103)
Net income		648	544	90
Net income of non-controlling interest		1	6	
Net income of controlling interest	Ps	647	538	90

As of December 31, 2016 and 2015, the balance sheets of CEMEX's Croatian discontinued operations, including its assets in Bosnia and Herzegovina, Montenegro and Serbia, were reclassified to current assets and current liabilities held for sale. In addition, as mentioned above, the balance sheet of CEMEX's Pipe Business as of

## Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Discontinued operations — continued

December 31, 2016 was reclassified to current assets and current liabilities held for sale. Selected combined condensed financial information of balance sheet of these operations was as follows:

		2016	2015
Current assets	Ps	1,570	438
Property, machinery and equipment, net		5,798	2,562
Intangible assets, net and other non-current assets		6,222	446
Total assets held for sale		13,590	3,446
Current liabilities		599	442
Non-current liabilities		694	231
Total liabilities directly related to assets held for sale		1,293	673
Net assets held for sale	Ps	12,297	2,773

The balance sheet of CEMEX as of December 31, 2015 was not restated as a result of the expected sale of its Concrete Pipe Business nor for the sale of the operations in Bangladesh and Thailand described above. Selected condensed combined financial information of balance sheet at this date of CEMEX's Concrete Pipe Business, Bangladesh and Thailand was as follows:

	2015
Current assets	832
Property, machinery and equipment, net	2,446
Intangible assets, net and other non-current assets	4,921
Total assets	8,199
Current liabilities	70
Non-current liabilities	387
Total liabilities	457
Net assets	

#### 4B) OTHER DISPOSAL GROUPS

On November 18, 2016, a subsidiary of CEMEX in the United States closed the sale to an affiliate of Grupo Cementos de Chihuahua, S.A.B. de C.V. ("GCC") of certain assets consisting in CEMEX's cement plant in Odessa, Texas, two cement terminals and the building materials business in El Paso, Texas and Las Cruces, New Mexico, for an amount of approximately US\$306 (Ps6,340). Odessa plant has an annual production capacity of approximately 537 thousand tons. The transfer of control was effective on November 18, 2016. As a result of the sale of these assets, CEMEX recognized a net gain of approximately US\$104 (Ps2,159) as part of "Other expenses, net" in the statement of operations, which includes an expense related to the proportional write off of goodwill associated to CEMEX's reporting segment in the United States based on their relative fair values for approximately US\$161 (Ps3,340) and the reclassification of proportional foreign currency translation gains associated with these net assets accrued in equity until disposal for approximately US\$65 (Ps1,347).

On September 12, 2016, CEMEX announced that one of its subsidiaries in the United States signed a definitive agreement for the sale of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to Eagle

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Other disposal groups — continued

Materials Inc. ("Eagle Materials") for approximately US\$400 (Ps8,288). Fairborn plant has an annual production capacity of approximately 730 thousand tons. The closing of this transaction is subject to the satisfaction of certain conditions, including approval from regulators. CEMEX currently expects to finalize this divestiture during the first quarter of 2017. The balance sheet of these assets as of December 31, 2016 was reclassified to assets held for sale and liabilities directly related to assets held for sale (note 12A), including approximately US\$211 (Ps4,365) of goodwill associated to the reporting segment in the United States that was proportionally allocated to these net assets based on their relative fair values.

The operations of the net assets sold to GCC on November 18, 2016 and those expected to be sold to Eagle Materials, mentioned above, did not represent discontinued operations and were consolidated by CEMEX line-by-line for all the periods presented in the statement of operations. In arriving to this conclusion, CEMEX evaluated: a) the Company's ongoing cement operations on its CGUs in Texas and the East coast; and b) the relative size of the net assets sold and held for sale in respect to the Company's remaining overall ongoing cement operations in the United States. Moreover, as a reasonability check, CEMEX measured the materiality of such net assets using a threshold of 5% of consolidated net sales, operating earnings before other expenses, net gain (loss) and total assets. In no case was the 5% threshold reached.

For 2016, 2015 and 2014, selected combined statement of operations information of the net assets sold to GCC on November 18, 2016 and those expected to be sold to Eagle Materials was as follows:

	2016	2015	2014	
Ps	3,122	3,538	4,465	
	(2,450)	(2,795)	(3,240)	
Ps	672	743	1,225	
		Ps 3,122 (2,450)	Ps 3,122 3,538 (2,450) (2,795)	Ps 3,122 3,538 4,465 (2,450) (2,795) (3,240) Ps 672 743 1,225

As of December 31, 2016, the condensed balance sheet of the net assets expected to be sold to Eagle Materials was as follows:

		2016
Current assets	Ps	123
Non-current assets		5,834
Total assets of the disposal group		5,957
Current liabilities		6
Non-current liabilities		158
Total liabilities directly related to disposal group		164
Total net assets of disposal group		

In addition, on December 2, 2016, CEMEX agreed the definite transfer of its assets and activities related to the ready-mix concrete pumping in Mexico to Cementos Españoles de Bombeo, S. de R.L., subsidiary in Mexico of Pumping Team S.L.L. ("Pumping Team"), specialist in the supply of ready-mix concrete pumping services based in Spain, for US\$80 (Ps1,658), which includes the sale of fixed assets upon closing of the transaction for approximately US\$15 (Ps311) plus administrative and client and market development services, as well as the

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

## Other disposal groups — continued

lease of facilities that CEMEX will supply to Pumping Team over a period of ten years with the possibility to extend for three additional years, for an aggregate initial amount of approximately US\$65 (Ps1,347), plus a contingent revenue subject to results for up to US\$29 (Ps601) linked to annual metrics beginning in the first year and up to the fifth year of the agreement. As of December 31, 2016, the closing of the transaction is subject to certain conditions, including approval by the Mexican authorities. CEMEX expects to conclude this transaction during the first quarter of 2017.

Effective January 1, 2015, as part of a series of related transactions agreed on October 31, 2014 with Holcim Ltd. ("Holcim"), then a global producer of building materials based in Switzerland, currently LafargeHolcim after the merger of Holcim with Lafarge, S.A., during 2015, CEMEX sold to Holcim its assets in the western region of Germany, consisting of one cement plant, two cement grinding mills, one slag granulator, 22 aggregates quarries and 79 ready-mix plants for approximately €171 (US\$207 or Ps3,047), while CEMEX maintained its operations in the northern, eastern and southern regions of the country. The operations of the net assets sold by CEMEX to Holcim were consolidated by CEMEX line-by-line for the year ended December 31, 2014, considering that this transaction did not represent the disposal of entire reportable operating segment. In arriving to this conclusion, CEMEX evaluated: a) the Company's remaining operations in the North, East and South regions of Germany; and b) the relative size of the net assets sold in respect to the Company's remaining overall ongoing operations in such country. Moreover, as a reasonability check, CEMEX measured the materiality of such net assets using a threshold of 5% of consolidated net sales, operating earnings before other expenses, net, net income (loss) and total assets. In any case the 5% threshold was reached.

For the year 2014, selected combined statement of operations information of the net assets sold in Germany was as follows:

		2014
Net sales	Ps	6,655
Operating costs and expenses		(6,428)
Operating earnings before other expenses, net	Ps	227

During 2014, CEMEX sold significantly all the operating assets of Readymix plc ("Readymix"), CEMEX's main operating subsidiary in the Republic of Ireland, and an indirect subsidiary of CEMEX España, for €19 (US\$23 or Ps339), recognizing a loss on sale of approximately €14 (US\$17 or Ps250).

#### 4C) SELECTED FINANCIAL INFORMATION BY GEOGRAPHIC OPERATING SEGMENT

Geographic operating segments represent the components of CEMEX that engage in business activities from which CEMEX may earn revenues and incur expenses, whose operating results are regularly reviewed by the entity's top management to make decisions about resources to be allocated to the segments and assess their performance, and for which discrete financial information is available.

CEMEX's main activities are oriented to the construction industry segment through the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates and other construction materials. CEMEX operates geographically on a regional basis. Effective January 1, 2016, according to an announcement made by CEMEX's Chief Executive Officer ("CEO"), the Company's operations were reorganized into five geographical regions,

#### Selected financial information by geographic operating segment — continued

each under the supervision of a regional president, as follows: 1) Mexico, 2) United States, 3) Europe, 4) South, Central America and the Caribbean, and 5) Asia, Middle East and Africa. Each regional president supervises and is responsible for all the business activities in the countries comprising the region. These activities refer to the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates and other construction materials, the allocation of resources and the review of their performance and operating results. All regional presidents report directly to CEMEX's CEO. The country manager, who is one level below the regional president in the organizational structure, reports the performance and operating results of its country to the regional president, including all the operating sectors. CEMEX's top management internally evaluates the results and performance of each country and region for decision-making purposes and allocation of resources, following a vertical integration approach considering: a) that the operating components that comprise the reported segment have similar economic characteristics; b) that the reported segments are used by CEMEX to organize and evaluate its activities in its internal information system; c) the homogeneous nature of the items produced and traded in each operative component, which are all used by the construction industry; d) the vertical integration in the value chain of the products comprising each component; e) the type of clients, which are substantially similar in all components; f) the operative integration among components; and g) that the compensation system for employees of a specific country is based on the consolidated results of the geographic segment and not on the particular results of the components. In accordance with this approach, in CEMEX's daily operations, management allocates economic resources and evaluates operating results on a country basis rather than on an operating component basis. The financial information by geographic operating segment reported in the tables below for the years ended December 31, 2015 and 2014 was restated in order to give effect to: a) the discontinued operations described in note 4A, and b) the new geographical operating organization described above. Until December 31, 2015, CEMEX's operations were organized into six geographical regions, also each under the supervision of a regional president: 1) Mexico, 2) United States, 3) Northern Europe, 4) Mediterranean, 5) South, Central America and the Caribbean, and 6) Asia. Under the current operating organization, the geographical operating segments under the former Mediterranean region were incorporated into the current Europe region or the Asia, Middle East and Africa region, as corresponded.

Considering the financial information that is regularly reviewed by CEMEX's top management, each of the five geographic regions in which CEMEX operates and the countries that comprise such regions represent reportable operating segments. However, for disclosure purposes in the notes to the financial statements, considering similar regional and economic characteristics and/or the fact that certain countries do not exceed certain materiality thresholds to be reported separately, such countries have been aggregated and presented as single line items as follows: a) "Rest of Europe" is mainly comprised of CEMEX's operations in the Czech Republic, Poland and Latvia, as well as trading activities in Scandinavia and Finland; b) "Rest of South, Central America and the Caribbean" is mainly comprised of CEMEX's operations in Costa Rica, Panama, Puerto Rico, the Dominican Republic, Nicaragua, Jamaica and other countries in the Caribbean, Guatemala, and small ready-mix concrete operations in Argentina; and c) "Rest of Asia, Middle East and Africa" is mainly comprised of CEMEX's operations in the United Arab Emirates, Israel and Malaysia. The segment "Others" refers to: 1) cement trade maritime operations, 2) Neoris N.V., CEMEX's subsidiary involved in the development of information technology solutions, 3) the Parent Company and other corporate entities, and 4) other minor subsidiaries with different lines of business.

The main indicator used by CEMEX's management to evaluate the performance of each country is "Operating EBITDA" representing operating earnings before other expenses, net, plus depreciation and amortization, considering that such amount represents a relevant measure for CEMEX's management as an indicator of the

#### Selected financial information by geographic operating segment — continued

ability to internally fund capital expenditures, as well as a widely accepted financial indicator to measure CEMEX's ability to service or incur debt (note 16). Operating EBITDA should not be considered as an indicator of CEMEX's financial performance, as an alternative to cash flows, as a measure of liquidity, or as being comparable to other similarly titled measures of other companies. This indicator, which is presented in the selected financial information by geographic operating segment, is consistent with the information used by CEMEX's management for decision-making purposes. The accounting policies applied to determine the financial information by geographic operating segment are consistent with those described in note 2. CEMEX recognizes sales and other transactions between related parties based on market values.

Selected information of the consolidated statements of operations by geographic operating segment for the years ended December 31, 2016, 2015 and 2014 was as follows:

2016	Net sales (including related parties)	Less: Related parties	Net sales	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net	Other expenses, net		Other financing items, net
Mexico Pr	s 53,579	(848)	52,731	19,256	2,390	16,866	(608)	(339)	2,695
United States	68,553	_	68,553	11,159	6,605	4,554	2,911	(489)	(205)
Europe									
United Kingdom	21,153	_	21,153	3,606	1,047	2,559	711	(63)	(393)
Germany	9,572	(1,385)	8,187	553	464	89	(64)	(15)	(85)
France	14,535	_	14,535	669	484	185	(110)	(53)	2
Spain	6,563	(841)	5,722	814	663	151	(112)	(37)	(9)
Rest of Europe	10,881	(629)	10,252	1,420	914	506	(63)	(23)	203
South, Central America									
and the Caribbean ("SAC")									
Colombia 1	12,415	(1)	12,414	3,975	489	3,486	(575)	46	38
Rest of SAC 1	18,820	(1,252)	17,568	6,126	892	5,234	(1,255)	(65)	(150)
Asia, Middle East and									
Africa ("AMEA")									
Egypt	6,950	(5)	6,945	2,454	539	1,915	(213)	(78)	(253)
Philippines <sup>2</sup>	9,655	_	9,655	2,687	530	2,157	21	(1)	(24)
Rest of AMEA	12,676	(12)	12,664	1,607	325	1,282	(122)	(27)	(33)
Others	19,128	(8,598)	10,530	(2,915)	805	(3,720)	(2,167)	(20,324)	2,655
Continuing									
operations	264,480	(13.571)	250,909	51,411	16,147	35,264	(1.646)	(21,468)	4,441
Discontinued	,	(,0,1)		,	,,	,	(-,5.0)	(==,:00)	-,
operations	8,223	(207)	8,016	1,355	537	818	(15)	(29)	4
<b>Total</b>	s <u>272,703</u>	(13,778)	258,925	52,766	16,684	36,082	(1,661)	(21,497)	4,445

<sup>1</sup> CEMEX Latam Holdings, S.A. ("CLH"), entity incorporated in Spain which since 2012 trades its ordinary shares in the Colombian Stock Exchange under the symbol CLH is the indirect holding company of CEMEX's operations in Colombia, Panama, Costa Rica, Guatemala, El Salvador and Brazil. At year end 2016, there is a non-controlling interest in CLH of approximately 26.72% of its ordinary shares, excluding shares held in CLH's treasury.

# Selected financial information by geographic operating segment — continued

2 CEMEX's operations in the Philippines are conducted through CEMEX Holdings Philippines, Inc. ("CHP"), subsidiary incorporated in the Philippines which since July 2016 trades its ordinary shares in the Philippines Stock Exchange under the symbol CHP (note 20D). At year end 2016, there is a non-controlling interest in CHP of 45.0% of its ordinary shares.

2015	Net sales (including related parties)	Less: Related parties	Net sales	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net			Other financing items, net
Mexico Ps	50,260	(5,648)	44,612	15,362	2,399	12,963	(684)	(210)	915
United States	58,668	(18)	58,650	8,080	5,865	2,215	252	(439)	
Europe	,	, ,	,	ŕ	,	,		` ′	` /
United Kingdom	20,227	_	20,227	2,705	1,004	1,701	(147)	(95)	(299)
Germany	8,285	(1,276)	7,009	542	389	153	49	(14)	(61)
France	12,064		12,064	670	438	232	(8)	(48)	(10)
Spain	6,151	(755)	5,396	1,031	604	427	(735)	(72)	(2)
Rest of Europe	10,010	(767)	9,243	1,419	972	447	(182)	(57)	(75)
South, Central									
America and the									
Caribbean ("SAC")									
Colombia	11,562	(2)	11,560	4,041	500	3,541	(88)	(50)	(570)
Rest of SAC	19,169	(2,285)	16,884	5,211	844	4,367	(267)	(43)	(113)
Asia, Middle East and									
Africa ("AMEA")									
Egypt	6,923	(5)	6,918	1,777	536	1,241	(254)	(115)	114
Philippines	8,436	(4)	8,432	2,206	447	1,759	(12)	(20)	19
Rest of AMEA	11,025	_	11,025	1,264	277	987	(69)	(23)	97
Others	17,058	(8,752)	8,306	(2,954)	590	(3,544)	(898)	(18,581)	(1,091)
Continuing									
operations	239,838	(19.512)	220,326	41.354	14,865	26,489	(3.043)	(19,767)	(1.235)
Discontinued	,	( - )/	- ,	,	,	-,	(- , )	( - ), - )	( , === )
operations	10,918	(57)	10,861	1,381	771	610	33	(33)	(32)
Total Ps	250,756	(19,569)	231,187	42,735	15,636	27,099	(3,010)	(19,800)	(1,267)

# Selected financial information by geographic operating segment — continued

2014	Net sales (including related parties)	Less: Related parties	Net sales	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net	Other expenses, net	Financial expense	
Mexico Ps	51,412	(10,143)	41,269	13,480	2,420	11,060	734	(262)	481
United States	45,691	(33)	45,658	4,962	5,296	(334)	(352)	(411)	(123)
Europe									
United Kingdom	17,071	_	17,071	1,672	1,004	668	1,062	(33)	(378)
Germany	14,138	(1,247)	12,891	869	625	244	(797)	(29)	(122)
France	12,914	_	12,914	852	516	336	(94)	(72)	(4)
Spain	4,717	(559)	4,158	363	571	(208)	(2,107)	(29)	(4)
Rest of Europe	9,101	(921)	8,180	1,080	667	413	(367)	(26)	(56)
South, Central America and the Caribbean ("SAC")									
Colombia	13,242	(1)	13,241	4,838	476	4,362	52	(90)	(353)
Rest of SAC	16,292	(1,865)	14,427	4,767	688	4,079	(101)	(44)	9
Asia, Middle East and Africa ("AMEA")									
Egypt	7,123	(12)		2,664	474	2,190	(209)	` ′	
Philippines	5,912	(2)	5,910	1,374	338	1,036	40	(5)	
Rest of AMEA	9,694	(6)	,	1,098	254	844	(147)	(19)	
Others	13,531	(6,107)	7,424	(2,463)	374	(2,837)	(2,759)	(20,435)	3,047
Continuing operations	220,838	(20,896)	199,942	35,556	13,703	21,853	(5,045)	(21,483)	2,531
Discontinued									
operations	10,134	(53)	10,081	1,084	753	331	(83)	(18)	(37)
Total Ps	230,972	(20,949)	210,023	36,640	14,456	22,184	(5,128)	(21,501)	2,494

The information of share of profits of equity accounted investees by geographic operating segment for the years ended December 31, 2016, 2015 and 2014 is included in the note 13A.

# Selected financial information by geographic operating segment — continued

As of December 31, 2016 and 2015, selected balance sheet information by geographic segment was as follows:

2016	Equity accounted investees	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets <sup>1</sup>
Mexico	Ps 490	70,012	70,502	20,752	49,750	1,651
United States	1,587	287,492	289,079	30,118	258,961	3,760
Europe						
United Kingdom	104	32,469	32,573	22,914	9,659	599
Germany	74	8,396	8,470	6,694	1,776	507
France	909	16,855	17,764	6,829	10,935	379
Spain	13	27,251	27,264	3,206	24,058	490
Rest of Europe	276	16,223	16,499	4,643	11,856	440
South, Central America and the						
Caribbean						
Colombia		26,532	26,532	11,548	14,984	3,633
Rest of South, Central America and the						
Caribbean	28	22,321	22,349	5,931	16,418	637
Asia, Middle East and Africa						
Egypt	1	5,512	5,513	2,907	2,606	381
Philippines	6	12,308	12,314	2,696	9,618	341
Rest of Asia, Middle East and Africa		12,347	12,347	6,994	5,353	394
Others	6,996	26,333	33,329	276,305	(242,976)	67
Continuing operations	10,484	564,051	574,535	401,537	172,998	13,279
Assets held for sale and directly related						
liabilities (note 12A)	4	25,189	25,193	1,466	23,727	(1)
Total	Ps <u>10,488</u>	589,240	599,728	403,003	196,725	13,278

### Selected financial information by geographic operating segment — continued

2015	Equity accounted investees	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets <sup>1</sup>
Mexico	Ps 438	75,215	75,653	16,936	58,717	1,177
United States	1,228	260,847	262,075	22,832	239,243	3,453
Europe						
United Kingdom	103	32,339	32,442	19,054	13,388	925
Germany	64	7,278	7,342	5,988	1,354	362
France	582	14,577	15,159	6,704	8,455	515
Spain	94	23,544	23,638	2,810	20,828	281
Rest of Europe	291	15,043	15,334	4,025	11,309	594
South, Central America and the						
Caribbean						
Colombia		19,499	19,499	8,959	10,540	2,601
Rest of South, Central America and the						
Caribbean	24	21,714	21,738	5,110	16,628	965
Asia, Middle East and Africa						
Egypt	11	9,310	9,321	4,499	4,822	762
Philippines	6	10,447	10,453	2,907	7,546	329
Rest of Asia, Middle East and Africa		12,055	12,055	6,205	5,850	288
Others	9,309	22,855	32,164	271,794	(239,630)	61
Continuing operations	12,150	524,723	536,873	377,823	159,050	12,313
Assets held for sale and directly related						
liabilities (note 12A)	4	5,387	5,391	673	4,718	154
Total	Ps <u>12,154</u>	530,110	542,264	378,496	163,768	12,467

In 2016 and 2015, the total "Additions to fixed assets" includes capital expenditures of approximately Ps12,676 and Ps11,454, respectively (note 14).

Total consolidated liabilities as of December 31, 2016 and 2015 included debt of Ps236,232 and Ps229,343, respectively. Of such balances, as of December 31, 2016 and 2015, approximately 73% and 71% was in the Parent Company, less than 1% and 1% was in Spain, 25% and 27% was in finance subsidiaries in the Netherlands, Luxembourg and the United States, and 2% and 1% was in other countries, respectively. The Parent Company and the finance subsidiaries mentioned above are included within the segment "Others".

# Selected financial information by geographic operating segment — continued

Net sales by product and geographic segment for the years ended December 31, 2016, 2015 and 2014 were as follows:

2016	Cement	Concrete	Aggregates	Others	Eliminations	Net sales
Mexico	Ps 37,647	13,664	3,156	11,773	(13,509)	52,731
United States	28,585	36,452	15,296	7,999	(19,779)	68,553
Europe						
United Kingdom	5,267	7,830	8,195	7,889	(8,028)	21,153
Germany	3,416	4,539	2,112	2,262	(4,142)	8,187
France	_	11,883	5,640	278	(3,266)	14,535
Spain	5,478	823	196	472	(1,247)	5,722
Rest of Europe	6,397	4,241	1,475	555	(2,416)	10,252
South, Central America and the Caribbean						
Colombia	8,814	4,522	1,364	1,761	(4,047)	12,414
Rest of South, Central America and the						
Caribbean	16,660	3,493	914	563	(4,062)	17,568
Asia, Middle East and Africa						
Egypt	6,076	943	26	217	(317)	6,945
Philippines	9,405	143	164	70	(127)	9,655
Rest of Asia, Middle East and Africa	961	10,293	2,573	1,407	(2,570)	12,664
Others				19,127	(8,597)	10,530
Continuing operations	128,706	98,826	41,111	54,373	(72,107)	250,909
Discontinued operations	2,122	250	15	5,747	(118)	8,016
Total	Ps130,828	99,076	41,126	60,120	(72,225)	258,925
Total	=====	====	====	====	(72,223)	====
2015	Cement	Concrete	Aggregates	Others	Eliminations	Net sales
<u>2015</u> Mexico		<b>Concrete</b> 13,163	2,860	9,956	$\frac{\textbf{Eliminations}}{(11,751)}$	44,612
Mexico	Ps 30,384 23,358	13,163 30,575	2,860 12,524	9,956 8,758	(11,751) (16,565)	44,612 58,650
Mexico	Ps 30,384 23,358 4,705	13,163 30,575 7,729	2,860 12,524 7,614	9,956 8,758 7,859	(11,751) (16,565) (7,680)	44,612 58,650 20,227
Mexico	Ps 30,384 23,358	13,163 30,575 7,729 3,749	2,860 12,524 7,614 1,790	9,956 8,758 7,859 2,103	(11,751) (16,565) (7,680) (3,731)	44,612 58,650 20,227 7,009
Mexico United States Europe United Kingdom Germany France	Ps 30,384 23,358 4,705 3,098	13,163 30,575 7,729 3,749 10,026	2,860 12,524 7,614 1,790 4,410	9,956 8,758 7,859 2,103 224	(11,751) (16,565) (7,680) (3,731) (2,596)	44,612 58,650 20,227 7,009 12,064
Mexico United States Europe United Kingdom Germany France Spain	Ps 30,384 23,358 4,705 3,098 — 5,265	13,163 30,575 7,729 3,749 10,026 721	2,860 12,524 7,614 1,790 4,410 150	9,956 8,758 7,859 2,103 224 392	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132)	44,612 58,650 20,227 7,009 12,064 5,396
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe	Ps 30,384 23,358 4,705 3,098	13,163 30,575 7,729 3,749 10,026	2,860 12,524 7,614 1,790 4,410	9,956 8,758 7,859 2,103 224	(11,751) (16,565) (7,680) (3,731) (2,596)	44,612 58,650 20,227 7,009 12,064
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966	13,163 30,575 7,729 3,749 10,026 721 3,623	2,860 12,524 7,614 1,790 4,410 150 1,191	9,956 8,758 7,859 2,103 224 392 519	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056)	44,612 58,650 20,227 7,009 12,064 5,396 9,243
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia	Ps 30,384 23,358 4,705 3,098 — 5,265	13,163 30,575 7,729 3,749 10,026 721	2,860 12,524 7,614 1,790 4,410 150	9,956 8,758 7,859 2,103 224 392	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132)	44,612 58,650 20,227 7,009 12,064 5,396
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966 8,158	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329	9,956 8,758 7,859 2,103 224 392 519 1,345	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966	13,163 30,575 7,729 3,749 10,026 721 3,623	2,860 12,524 7,614 1,790 4,410 150 1,191	9,956 8,758 7,859 2,103 224 392 519	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056)	44,612 58,650 20,227 7,009 12,064 5,396 9,243
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa	Ps 30,384 23,358 4,705 3,098  5,265 5,966 8,158 14,846	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898	9,956 8,758 7,859 2,103 224 392 519 1,345	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt	Ps 30,384 23,358 4,705 3,098  5,265 5,966 8,158 14,846 6,052	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966 8,158 14,846 6,052 8,270	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975 115	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898 36 95	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines Rest of Asia, Middle East and Africa	Ps 30,384 23,358 4,705 3,098  5,265 5,966 8,158 14,846 6,052	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62 1,180	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110) (1,960)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432 11,025
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966 8,158 14,846 6,052 8,270	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975 115	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898 36 95	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines Rest of Asia, Middle East and Africa Others Continuing operations	Ps 30,384 23,358 4,705 3,098 — 5,265 5,966 8,158 14,846 6,052 8,270	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975 115	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898 36 95	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62 1,180	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110) (1,960)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432 11,025
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines Rest of Asia, Middle East and Africa Others	Ps 30,384 23,358 4,705 3,098 5,265 5,966 8,158 14,846 6,052 8,270 880 —	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975 115 8,945 —	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898 36 95 1,980	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62 1,180 17,057	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110) (1,960) (8,751)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432 11,025 8,306
Mexico United States Europe United Kingdom Germany France Spain Rest of Europe South, Central America and the Caribbean Colombia Rest of South, Central America and the Caribbean Asia, Middle East and Africa Egypt Philippines Rest of Asia, Middle East and Africa Others Continuing operations	Ps 30,384 23,358 4,705 3,098 5,265 5,966 8,158 14,846 6,052 8,270 880 — 110,982 2,787	13,163 30,575 7,729 3,749 10,026 721 3,623 4,428 3,850 975 115 8,945 — 87,899	2,860 12,524 7,614 1,790 4,410 150 1,191 1,329 898 36 95 1,980 — 34,877	9,956 8,758 7,859 2,103 224 392 519 1,345 731 236 62 1,180 17,057 50,422	(11,751) (16,565) (7,680) (3,731) (2,596) (1,132) (2,056) (3,700) (3,441) (381) (110) (1,960) (8,751) (63,854)	44,612 58,650 20,227 7,009 12,064 5,396 9,243 11,560 16,884 6,918 8,432 11,025 8,306 220,326

### Selected financial information by geographic operating segment — continued

2014	Cement	Concrete	Aggregates	Others	Eliminations	Net sales
Mexico	Ps 27,667	12,855	2,963	9,056	(11,272)	41,269
United States	17,937	21,490	9,886	8,857	(12,512)	45,658
Europe						
United Kingdom	3,824	6,666	6,128	7,929	(7,476)	17,071
Germany	4,883	6,600	4,042	2,434	(5,068)	12,891
France		10,826	4,585	215	(2,712)	12,914
Spain	3,856	783	168	359	(1,008)	4,158
Rest of Europe	5,305	3,154	1,089	341	(1,709)	8,180
South, Central America and the Caribbean						
Colombia	9,544	4,964	1,547	770	(3,584)	13,241
Rest of South, Central America and the						
Caribbean	13,123	3,417	712	690	(3,515)	14,427
Asia, Middle East and Africa						
Egypt	6,402	542	19	318	(170)	7,111
Philippines	5,849	48	_	27	(14)	5,910
Rest of Asia, Middle East and Africa	593	7,993	1,831	1,093	(1,822)	9,688
Others				11,607	(4,183)	7,424
Continuing operations	98,983	79,338	32,970	43,696	(55,045)	199,942
Discontinued operations	2,694	2,827	1,356	3,992	(788)	10,081
Total	Ps <u>101,677</u>	82,165	34,326	47,688	(55,833)	210,023

# 5) OPERATING EXPENSES, DEPRECIATION AND AMORTIZATION

Consolidated operating expenses during 2016, 2015 and 2014 by function are as follows:

		2016	2015	2014
Administrative expenses <sup>1</sup>	Ps	20,883	18,717	16,984
Selling expenses		6,954	5,943	5,674
Distribution and logistics expenses		25,925	23,109	20,689
	Ps	53,762	47,769	43,347

<sup>1</sup> The Technology and Energy departments in CEMEX undertake all significant R&D activities as part of their daily activities. In 2016, 2015 and 2014, total combined expenses of these departments recognized within administrative expenses were approximately Ps712 (US\$38), Ps660 (US\$41) and Ps538 (US\$36), respectively.

Depreciation and amortization recognized during 2016, 2015 and 2014 are detailed as follows:

	2016	2015	2014
Depreciation and amortization expense included in cost of sales	Ps 14,299	13,329	12,379
Depreciation and amortization expense included in administrative, selling and			
distribution and logistics expenses	1,848	1,536	1,324
	Ps 16,147	14,865	13,703

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### 6) OTHER EXPENSES, NET

The detail of the line item "Other expenses, net" in 2016, 2015 and 2014 was as follows:

	2016	2015	2014
Ps	(2,516)	(1,526)	(3,848)
	(778)	(845)	(544)
	(93)	(60)	(18)
	1,741	(612)	(635)
Ps	(1,646)	(3,043)	(5,045)
		Ps (2,516) (778) (93) 1,741	Ps (2,516) (1,526) (778) (845) (93) (60)

<sup>1</sup> The main effects included in this line item for the years ended December 31, 2016, 2015 and 2014 are described in notes 13B, 14, 15 and 24A.

### 7) OTHER FINANCIAL INCOME (EXPENSE), NET

The detail of the line item "Other financial income (expense), net" in 2016, 2015 and 2014 was as follows:

		2016	2015	2014	
Financial income	Ps	417	315	312	
Results from financial instruments, net (notes 13B and 16D)		113	(2,729)	(880)	
Foreign exchange results		4,943	2,083	3,936	
Effects of NPV on assets and liabilities and others, net		(1,032)	(904)	(837)	
	Ps	4,441	(1,235)	2,531	

### 8) CASH AND CASH EQUIVALENTS

As of December 31, 2016 and 2015, consolidated cash and cash equivalents consisted of:

		2016	2015
Cash and bank accounts	Ps	9,044	11,395
Fixed-income securities and other cash equivalents		2,511	3,885
	Ps	11,555	15,280

Based on net settlement agreements, the balance of cash and cash equivalents excludes deposits in margin accounts that guarantee several obligations of CEMEX of approximately Ps250 in 2016 and Ps258 in 2015, which were offset against the corresponding obligations of CEMEX with the counterparties, considering CEMEX's right, ability and intention to settle the amounts on a net basis.

<sup>2</sup> In 2016, 2015 and 2014, restructuring costs mainly refer to severance payments.

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### 9) TRADE ACCOUNTS RECEIVABLE, NET

As of December 31, 2016 and 2015, consolidated trade accounts receivable consisted of:

		2016	2015
Trade accounts receivable	Ps	32,088	29,773
Allowances for doubtful accounts		(2,139)	(1,999)
	Ps	29,949	27,774

As of December 31, 2016 and 2015, trade accounts receivable include receivables of Ps13,644 (US\$658) and Ps12,858 (US\$746), respectively, that were sold under outstanding securitization programs for the sale of trade accounts receivable and/or factoring programs with recourse in Mexico, the United States, France and the United Kingdom. Under the outstanding securitization programs, CEMEX effectively surrenders control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, CEMEX retains certain residual interest in the programs and/or maintains continuing involvement with the accounts receivable; therefore, the amounts received are recognized within "Other financial obligations". Trade accounts receivable qualifying for sale exclude amounts over certain days past due or concentrations over certain limits to any one customer, according to the terms of the programs. The portion of the accounts receivable sold maintained as reserves amounted to Ps2,549 in 2016 and Ps2,357 in 2015. Therefore, the funded amount to CEMEX was Ps11,095 (US\$535) in 2016 and Ps10,501 (US\$609) in 2015, representing the amounts recognized within the line item of "Other financial obligations." The discount granted to the acquirers of the trade accounts receivable is recorded as financial expense and amounted to approximately Ps258 (US\$14) in 2016, Ps249 (US\$16) in 2015 and Ps298 (US\$22) in 2014. CEMEX's securitization programs are negotiated for specific periods and may be renewed at their maturity. The securitization programs outstanding as of December 31, 2016 in Mexico, the United States, France and the United Kingdom mature in March 2017, respectively.

Allowances for doubtful accounts are established according to the credit history and risk profile of each customer. Changes in the valuation of this caption allowance for doubtful accounts in 2016, 2015 and 2014, were as follows:

		2016	2015	2014
Allowances for doubtful accounts at beginning of period	Ps	1,999	1,856	1,804
Charged to selling expenses		556	439	442
Deductions		(867)	(270)	(394)
Foreign currency translation effects		451	(26)	4
Allowances for doubtful accounts at end of period	Ps	2,139	1,999	1,856

#### 10) OTHER ACCOUNTS RECEIVABLE

As of December 31, 2016 and 2015, consolidated other accounts receivable consisted of:

		2016	2015
Non-trade accounts receivable <sup>1</sup>	Ps	2,503	2,332
Interest and notes receivable <sup>2</sup>		1,523	1,332
Loans to employees and others		188	177
Refundable taxes		965	976
	Ps	5,179	4,817

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Other accounts receivable — continued

- Non-trade accounts receivable are mainly attributable to the sale of assets.
- Includes Ps27 in 2016 and Ps148 in 2015, representing the short-term portion of a restricted investment related to coupon payments under CEMEX's perpetual debentures (note 20D). In addition, in 2016, includes CEMEX Colombia's beneficial interest in a trust oriented to promote housing projects, which its only asset is land in the municipality of Zipaquira, Colombia and its only liability is a bank credit for approximately Ps148, guaranteed by CEMEX Colombia, obtained to purchase the land. The estimated fair value of the land as determined by external appraiser significantly exceeds the amount of the loan.

### 11) INVENTORIES, NET

As of December 31, 2016 and 2015, the consolidated balance of inventories was summarized as follows:

		2016	2015
Finished goods	Ps	5,805	6,439
Work-in-process		3,316	3,160
Raw materials			3,217
Materials and spare parts		4,888	4,822
Inventory in transit			525
Allowance for obsolescence		(435)	(447)
	Ps	17,862	

For the years ended December 31, 2016, 2015 and 2014, CEMEX recognized within "Cost of sales" in profit or loss, inventory impairment losses of approximately Ps52, Ps49 and Ps36, respectively.

### 12) ASSETS HELD FOR SALE AND OTHER CURRENT ASSETS

#### 12A) ASSETS HELD FOR SALE

As of December 31, 2016 and 2015, assets held for sale, which are measured at the lower of their estimated realizable value, less costs to sell, and their carrying amounts, as well as liabilities directly related with such assets are detailed as follows:

		2016					
		Assets	Liabilities	Net assets	Assets	Liabilities	Net assets
Concrete Pipe Division (note 4A)	Ps	9,426	642	8,784	Ps —	_	_
CEMEX's operations in Croatia (note 4A)		4,164	651	3,513	3,446	673	2,773
Fairborn cement plant (note 4B)		5,957	164	5,793	_	_	_
Concrete pumping equipment (note 4B)		213	_	213	_	_	_
Idle assets in Andorra, Spain		560	_	560	481	_	481
Investment in GCC shares (note 13A) 1		3,882	_	3,882	_	_	_
Other assets held for sale <sup>2</sup>	_	991	9	982	1,464	_	1,464
	Ps 2	25,193	1,466	23,727	Ps <u>5,391</u>	673	<u>4,718</u>

1 CEMEX analyzes alternatives to sell its investment in 23% of GCC's common stock in the short-term. See note 26 for subsequent events related to this investment.

### CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Assets held for sale — continued

2 During 2014, CEMEX recognized impairment losses in connection with the remeasurement of other assets held for sale for approximately Ps55.

### 12B) OTHER CURRENT ASSETS

As of December 31, 2016 and 2015, other current assets are mainly comprised of advance payments.

# 13) EQUITY ACCOUNTED INVESTEES, OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

### 13A) EQUITY ACCOUNTED INVESTEES

As of December 31, 2016 and 2015, the main investments in common shares of associates were as follows:

	Activity	Country	<b>%</b>	2016	2015
Camcem, S.A. de C.V.	Cement	Mexico	40.1	Ps 3,674	600
Control Administrativo Mexicano, S.A. de C.V	Cement	Mexico	_	_	5,613
Trinidad Cement Limited	Cement	Trinidad and	39.5	1,689	1,543
		Tobago			
Concrete Supply Co. LLC	Concrete	United States	40.0	1,234	932
Akmenes Cementas AB	Cement	Lithuania	37.8	586	560
ABC Capital, S.A. Institución de Banca					
Múltiple	Financing	Mexico	33.9	474	385
Lehigh White Cement Company	Cement	United States	24.5	334	276
Société Méridionale de Carrières	Aggregates	France	33.3	300	241
Société d'Exploitation de Carrières	Aggregates	France	50.0	257	202
Industrias Básicas, S.A	Cement	Panama	25.0	155	133
Other companies	_	_	_	1,781	1,665
				Ps <u>10,484</u>	12,150
Out of which:					
Book value at acquisition date				Ps 8,260	4,683
Changes in stockholders' equity				Ps_2,224	7,467

As of December 31, 2016 and 2015, there were no written put options for the purchase of investments in associates.

On December 5, 2016, through one of its indirect subsidiaries, Sierra Trading ("Sierra"), CEMEX presented an offer and take-over bid (the "Offer") to all shareholders of Trinidad Cement Limited ("TCL"), a company publicly listed in Trinidad and Tobago, Jamaica and Barbados, to acquire up to 132,616,942 ordinary shares in TCL for Ps4.50 trinitarian dollars ("TT") in cash per TCL share, which together with Sierra's existing share ownership in TCL of approximately 39.5%, would, if successful, result in Sierra holding up to 74.9% of the equity share capital in TCL. Full acceptance of the Offer would result in a cash payment by Sierra of approximately TTPs597 million (US\$89 or Ps1,844). The Offer price represents a premium of 33.1% over the December 1, 2016 closing price of TCL's shares in the Trinidad and Tobago Stock Exchange. Among other

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Equity accounted investees — continued

conditions, the Offer is conditional on Sierra acquiring at least an amount of TCL shares that would allow CEMEX to consolidate TCL. Unless extended, the Offer period is expected to close on January 10, 2017. If the Offer is successful, TCL will continue operating as usual and will be maintained as a publicly listed company on the Trinidad and Tobago Stock Exchange with the benefit of a strong local shareholding together with the enhanced benefit of proven management and operational expertise from CEMEX. TCL's main operations are in Trinidad and Tobago, Jamaica and Barbados. TCL is the majority shareholder of Caribbean Cement Company Limited, a main cement producer in Jamaica. In connection with the Offer, on December 23, 2016, the Board of Directors of TCL announced its recommendation to TCL's shareholders of not selling their shares (see note 26 for recent developments related to the Offer).

During 2016, the Parent Company participated as shareholder in a share restructuring executed by Camcem, S.A. de C.V. ("Camcem"), indirect parent company of Control Administrativo Mexicano, S.A. de C.V. ("Camsa") and GCC, aimed to simplify its corporate structure, by means of which, Imin de México, S.A. de C.V., intermediate holding company, Camsa and GCC were merged, prevailing GCC as the surviving entity. As a result of the share restructuring, CEMEX's 10.3% interest in Camcem and 49% interest in Camsa, both before the restructuring, were exchanged on equivalent basis into a 40.1% interest in Camcem and a 23% interest in GCC, which shares of the latest trade in the MSE (note 12A).

In addition, during 2015, through the exercise of its preemptive rights in TCL's rights issuance and the purchase of shares not subscribed and fully paid up by other eligible TCL shareholders in the rights issuance, Sierra increased its participation in TCL from 20% to 39.5% for approximately Ps774 (US\$45). Moreover, in April 2015, CEMEX and TCL entered into a Technical Services Agreement (the "TSA") pursuant to which CEMEX will provide TCL with technical, managerial and other assistance from May 1, 2015 to May 1, 2018, unless earlier terminated.

Share of profit of equity accounted investees by geographic operating segment in 2016, 2015 and 2014 is detailed as follows:

		2016	2015	2014	
Mexico	Ps	452	330	242	
United States		253	92	4	
Europe		54	340	74	
Corporate and others		(71)	(24)	(26)	
	Ps	688	738	294	

Combined condensed balance sheet information of CEMEX's associates as of December 31, 2016 and 2015 is set forth below:

		2016	2015
Current assets		21,651	16,002
Non-current assets		41,085	30,435
Total assets		62,736	46,437
Current liabilities		11,612	8,342
Non-current liabilities		22,436	15,242
Total liabilities		34,048	23,584
Total net assets	Ps	28,688	22,853

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Equity accounted investees — continued

Combined selected information of the statements of operations of CEMEX's associates in 2016, 2015 and 2014 is set forth below:

		2016	2015	2014
Sales	Ps	29,791	25,484	21,173
Operating earnings		4,730	3,523	1,931
Income before income tax		3,111	3,350	484
Net income		1,860	2,403	228

#### 13B) OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

As of December 31, 2016 and 2015, consolidated other investments and non-current accounts receivable were summarized as follows:

		2016	2015
Non-current portion of valuation of derivative financial instruments	Ps	1,900	869
Non-current accounts receivable and other investments <sup>1</sup>		4,501	4,731
Investments available-for-sale <sup>2</sup>		491	632
Investments held for trading <sup>3</sup>		157	317
	Ps	7,049	6,549

- Includes, among other items: a) advances to suppliers of fixed assets of approximately Ps52 in 2016 and Ps54 in 2015; and b) the non-current portion of a restricted investment used to pay coupons under the perpetual debentures (note 20D) of Ps83 in 2015. CEMEX recognized impairment losses of non-current accounts receivable in Costa Rica of approximately Ps21 in 2016, Egypt and Colombia of approximately Ps71 and Ps22 in 2015, respectively; and the United Kingdom of approximately Ps16 in 2014.
- 2 This line item refers mainly to an investment in CPOs of Axtel, S.A.B. de C.V. ("Axtel"). This investment is recognized as available for sale at fair value and changes in valuation are recorded in other comprehensive loss until its disposal.
- 3 This line item refers to investments in private funds. In 2016 and 2015, no contributions were made to such private funds.

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

# 14) PROPERTY, MACHINERY AND EQUIPMENT, NET

As of December 31, 2016 and 2015, consolidated property, machinery and equipment, net and the changes in such line item during 2016, 2015 and 2014, were as follows:

				2016		
		Land and mineral reserves <sup>1</sup>	Building 1	Machinery and equipment <sup>2</sup>	Construction in progress <sup>3</sup>	Total
Cost at beginning of period	Ps	85,763	47,205	210,175	13,813	356,956
Accumulated depreciation and depletion		(12,194)	(20,852)	(109,777)		(142,823)
Net book value at beginning of period		73,569	26,353	100,398	13,813	214,133
Capital expenditures		2,149	1,856	8,671	_	12,676
Additions through capital leases		_	_	7	_	7
Capitalization of financial expense		_	_		175	175
Stripping costs		421				421
Total capital expenditures		2,570	1,856	8,678	175	13,279
Disposals <sup>4</sup>		(388)	(140)	(1,268)	(44)	(1,840)
Reclassifications <sup>5</sup>		(2,029)	(703)	(1,731)	(86)	(4,549)
Depreciation and depletion for the period		(2,430)	(2,068)	(9,658)	_	(14,156)
Impairment losses		(671)	(302)	(547)	(378)	(1,898)
Foreign currency translation effects		9,516	1,388	7,548	3,690	22,142
Cost at end of period		96,410	50,131	228,438	17,170	392,149
Accumulated depreciation and depletion		(16,273)	(23,747)	(125,018)		(165,038)
Net book value at end of period	Ps	80,137	26,384	103,420	17,170	227,111

### Property, machinery and equipment, net — continued

				2015			
		Land and mineral reserves <sup>1</sup>	Building <sup>1</sup>	Machinery and equipment <sup>2</sup>	Construction in progress <sup>3</sup>	Total	2014
Cost at beginning of period	Ps	78,511	43,473	185,629	13,480	321,093	309,668
Accumulated depreciation and							
depletion		(9,836)	(16,970)	(91,359)		(118,165)	(103,951)
Net book value at beginning of							
period		68,675	26,503	94,270	13,480	202,928	205,717
Capital expenditures Additions through capital		1,429	1,198	8,827	_	11,454	8,866
leases		_	_	63		63	108
Capitalization of financial							
expense		_	_	_	73	73	_
Stripping costs		723				723	512
Total capital							
expenditures		2,152	1,198	8,890	73	12,313	9,486
Disposals 4		(713)	(544)	(987)	(3)	(2,247)	(2,461)
Reclassifications <sup>5</sup>		(1,147)	(982)	(929)	(41)	(3,099)	(6,828)
Business combinations		1,372	757	1,869	6	4,004	_
period		(2,007)	(1,969)	(9,552)		(13,528)	(12,949)
Impairment losses Foreign currency translation		(338)	(114)	(693)		(1,145)	(589)
effects		5,575	1,504	7,530	298	14,907	10,552
Cost at end of period		85,763	47,205	210,175	13,813	356,956	321,093
depletion		(12,194)	(20,852)	(109,777)		(142,823)	(118,165)
Net book value at end of period	Ps	73,569	26,353	100,398	13,813	214,133	202,928

- 1 Includes corporate buildings and related land sold to financial institutions in previous years, which were leased back. The aggregate carrying amount of these assets as of December 31, 2016 and 2015 was approximately Ps1,777 and Ps1,865, respectively.
- Includes assets, mainly mobile equipment, acquired through capital leases, which carrying amount as of December 31, 2016 and 2015 was approximately Ps48 and Ps63, respectively.
- 3 In July 2014, CEMEX began the construction of a new cement plant in the municipality of Maceo, Antioquia department in Colombia with an annual production capacity of approximately 1.1 million tons. The first phase included the construction of a cement mill, which has been in testing phase with supplies of clinker from Caracolito plant in Ibague and the cement produced has been used entirely in the construction of the plant. The next phase that includes the construction of the kiln and the plant's access road is expected to be completed in phases by the first half of 2017, in order to start commercial operations during the second half of 2017, considering the successful conclusion of several undergoing procedures related to certain operational permits. In 2016, includes an investment reduction of approximately Ps483 (US\$23), of which,

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Property, machinery and equipment, net — continued

approximately Ps295 (US\$14) were recognized as impairment against the line item of "Other expenses, net", considering that the assets, mainly advances for the purchase of land through a representative, were considered contingent assets considering based on low probability for their recoverability due to deficiencies in the legal processes, and approximately Ps188 (US\$9) were decreased against "Other accounts payable" in connection with the cancellation of the portion payable of such assets (notes 6 and 24A). CEMEX determined an original total investment in the plant of approximately US\$340. As of December 31, 2016, Maceo project's book value, net of adjustments, is for an amount in Colombian pesos equivalent to approximately US\$275, excluding US\$11 of interest capitalized during the construction period.

- 4 In 2016, includes sales of non-strategic fixed assets in the United States, Mexico, and France for Ps317, Ps281 and Ps165, respectively. In 2015, includes the sales of non-strategic fixed assets in the United Kingdom, the United States and Spain for Ps584, Ps451 and Ps417, respectively. In 2014, includes the sales of non-strategic fixed assets in the United States, the United Kingdom and Ireland for Ps757, Ps539 and Ps537, respectively.
- In 2016, refers mainly to those assets of the Concrete Pipe Business in the United States for Ps2,747, as well as other disposal groups in the United States reclassified to assets available for sale for Ps1,386 (notes 4A, 4B and 12A). In 2015, refers to assets in Croatia for Ps2,562 and other disposal groups in the United States reclassified to assets available for sale for Ps537 (notes 4A, 4B and 12A). In 2014 refers primarily to the reclassification to other current assets in connection with the sale of assets in the western region of Germany and the projected sale of idle assets in Andorra, Spain (notes 4B and 12A) for Ps3,956 and Ps2,601, respectively.

As a result of impairment tests conducted on several CGUs considering certain triggering events, mainly: a) the closing and/or reduction of operations of cement and ready-mix concrete plants resulting from adjusting the supply to current demand conditions, such as the situation in Puerto Rico in the last quarter of 2016 due to the adverse outlook and the overall uncertain economic conditions in such country; b) the transferring of installed capacity to more efficient plants, such as the projected closing in the short-term of a cement mill in Colombia; as well as c) the recoverability of certain investments in Colombia as described above, for the years ended December 31, 2016, 2015 and 2014, CEMEX adjusted the related fixed assets to their estimated value in use in those circumstances in which the assets would continue in operation based on estimated cash flows during the remaining useful life, or to their realizable value, in case of permanent shut down, and recognized impairment losses within the line item of "Other expenses, net" (note 2J) during the years ended December 31, 2016, 2015 and 2014 in the following countries and for the following amounts:

		2016	2015	2014
Puerto Rico	Ps	1,087	172	_
Colombia		454	_	—
Spain		_	392	125
United States		277	269	108
Latvia		_	126	_
Panama		_	118	_
Mexico		46	46	221
United Kingdom		_	19	59
Germany		_	_	19
Other countries		34	3	43
	Ps	1,898	1,145	575

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

# 15) GOODWILL AND INTANGIBLE ASSETS, NET

# 15A) BALANCES AND CHANGES DURING THE PERIOD

As of December 31, 2016 and 2015, consolidated goodwill, intangible assets and deferred charges were summarized as follows:

		2016			2015			
	Cost	Accumulated amortization	Carrying amount		Cost	Accumulated amortization	Carrying amount	
Intangible assets of indefinite useful life:								
Goodwill P	s 205,835	_	205,835	Ps	183,752	_	183,752	
Intangible assets of definite								
useful life:								
Extraction rights	40,994	(5,948)	35,046		34,927	(4,600)	30,327	
Industrial property and								
trademarks	707	(350)	357		822	(200)	622	
Customer relationships	4,343	(4,084)	259		6,166	(5,162)	1,004	
Mining projects	961	(84)	877		992	(187)	805	
Others intangible assets	13,796	(9,150)	4,646		10,900	(7,092)	3,808	
P	s <u>266,636</u>	<u>(19,616)</u>	247,020	Ps	237,559	(17,241)	220,318	

The amortization of intangible assets of definite useful life was approximately Ps1,991 in 2016, Ps1,848 in 2015 and Ps1,508 in 2014, and was recognized within operating costs and expenses.

### Goodwill

Changes in consolidated goodwill in 2016, 2015 and 2014, were as follows:

		2016	2015	2014
Balance at beginning of period	Ps	183,752	160,544	144,457
Business combinations		_	64	_
Disposals, net (note 4B)		(3,340)	(552)	_
Reclassification to assets held for sale and other current assets (notes				
4A, 4B and 12)		(9,734)	(404)	_
Foreign currency translation effects		35,157	24,100	16,087
Balance at end of period	Ps	205,835	183,752	160,544

### Balances and changes during the period — continued

### Intangible assets of definite life

Changes in intangible assets of definite life in 2016, 2015 and 2014, were as follows:

				2016			
		Extraction rights	Industrial property and trademarks	Customer relations	Mining projects	Others 1	Total
Balance at beginning of period	Ps	30,327	622	1,004	805	3,808	36,566
Additions (disposals), net <sup>1</sup>		202	(760)	_	(382)	343	(597)
Amortization		(712)	(293)	(658)	(12)	(316)	(1,991)
Impairment losses		(6)	_	_	_	(19)	(25)
Foreign currency translation effects.		5,235	788	(87)	466	830	7,232
Balance at the end of period	Ps	35,046	357	259	877	4,646	41,185
			2015				
]	Extraction rights	Industria property a trademark	nd Customer	Mining projects	Others 1	Total	2014
Balance at beginning of period Ps	27,330	122	1,393	1,501	2,594	32,940	30,483
Business combinations	458	_	156	_	2	616	_
Additions (disposals), net 1	157	133	(1)	(577)	102	(186)	653
Reclassifications (notes 4A,							
4B and 12)	1	_		_	_	1	(5)
Amortization	(813)	(132)	(601)	(32)	(270)	(1,848)	(1,508)
Impairment losses Foreign currency translation	(10)	_	_	_	_	(10)	_
effects	3,204	499	57	(87)	1,380	5,053	3,317
Balance at the end of period Ps	30,327	622	1,004	805	3,808	36,566	32,940

<sup>1</sup> As of December 31, 2016 and 2015, "Others" includes the carrying amount of internal-use software of approximately Ps2,544 and Ps2,077, respectively. Capitalized direct costs incurred in the development stage of internal-use software, such as professional fees, direct labor and related travel expenses, amounted to approximately Ps769 in 2016, Ps615 in 2015 and Ps702 in 2014.

### 15B) MAIN ACQUISITIONS DURING THE REPORTED PERIODS

In connection with the agreements entered into with Holcim on October 31, 2014 as described in note 4B, CEMEX and Holcim agreed to conduct a series of related transactions, finally executed on January 5, 2015 after customary conditions precedent were concluded, with retrospective effects as of January 1, 2015, by means of which: a) in the Czech Republic, CEMEX acquired all of Holcim's assets, including a cement plant, four aggregates quarries and 17 ready-mix plants for approximately €115 (US\$139 or Ps2,049); b) in Germany, CEMEX sold to Holcim its assets in the western region of the country; c) in Spain, CEMEX acquired from Holcim one cement plant in the southern part of the country with a production capacity of 850 thousand tons, and one cement mill in the central part of the country with grinding capacity of 900 thousand tons, among other

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Main acquisitions during the reported periods — continued

related assets for approximately €88 (US\$106 or Ps1,562), after working capital adjustments; and d) CEMEX agreed a final payment in cash, after combined debt and working capital adjustments agreed with Holcim of approximately €33 (US\$40 or Ps594). The aforementioned transactions were authorized by the European competition authority in the case of Germany and Spain, and by the Czech Republic authority in respect to the transaction in this country. As of January 1, 2015, after concluding the purchase price allocation to the fair values of the assets acquired and liabilities assumed, no goodwill was determined in respect of the Czech Republic, while in Spain, the fair value of the net assets acquired for approximately €106 (US\$129 or Ps1,894) exceeded the purchase price in approximately €19 (US\$22 or Ps328), mainly as a result of market conditions in Spain and production overcapacity in the region.

After performing the required reassessment of fair values, this gain was recognized during 2015 in profit or loss. The purchase price allocation was as follows:

	Czech Republic	Spain	Total
Ps	231	59	290
	1,419	2,004	3,423
	270	_	270
	_590	2	592
	2,510	2,065	4,575
	117	57	174
	344	114	458
	461	_171	632
Ps	2,049	1,894	3,943
		Ps 231 1,419 270 590 2,510 117 344 461	Ps   Republic   Spain   59   1,419   2,004   270   —   590   2   2,510   2,065   117   57   344   114   461   171

### 15C) ANALYSIS OF GOODWILL IMPAIRMENT

As of December 31, 2016 and 2015, goodwill balances allocated by operating segment were as follows:

		2016	2015
Mexico	Ps	7,529	7,015
United States		162,692	146,161
Europe			
Spain		12,316	10,659
United Kingdom		6,043	5,330
France		4,524	3,860
Czech Republic		546	488
South, Central America and the Caribbean			
Colombia		6,461	5,236
Dominican Republic		250	215
Rest of South, Central America and the Caribbean <sup>1</sup>		1,034	877
Asia, Middle East and Africa			
Philippines		1,911	1,660
United Arab Emirates		1,748	1,562
Egypt		231	232
Others			
Other reporting segments <sup>2</sup>		550	457
	Ps	205,835	183,752

# CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

### Analysis of goodwill impairment — continued

- 1 This caption refers to the operating segments in the Caribbean, Argentina, Costa Rica and Panama.
- 2 This caption is primarily associated with Neoris N.V., CEMEX's subsidiary involved in the sale of information technology and services.

For purposes of goodwill impairment tests, all cash-generating units within a country are aggregated, as goodwill is allocated at that level. Considering materiality for disclosure purposes, certain balances of goodwill were presented for Rest of South, Central America and the Caribbean, but this does not represent that goodwill was tested at a higher level than for operations in an individual country.

Impairment tests are significantly sensitive to, among other factors, the estimation of future prices of CEMEX's products, the development of operating expenses, local and international economic trends in the construction industry, the long-term growth expectations in the different markets, as well as the discount rates and the longterm growth rates applied. CEMEX's cash flow projections to determine the value in use of its CGUs to which goodwill has been allocated consider the use of long-term economic assumptions. CEMEX believes that its discounted cash flow projections and the discount rates used reasonably reflect current economic conditions at the time of the calculations, considering, among other factors that: a) the cost of capital reflects current risks and volatility in the markets; and b) the cost of debt represents the average of industry specific interest rates observed in recent transactions. Other key assumptions used to determine CEMEX's discounted cash flows are volume and price increases or decreases by main product during the projected periods. Volume increases or decreases generally reflect forecasts issued by trustworthy external sources, occasionally adjusted based on CEMEX's actual backlog, experience and judgment considering its concentration in certain sectors, while price changes normally reflect the expected inflation in the respective country. Operating costs and expenses during all periods are maintained as a fixed percent of revenues considering historic performance. During the last quarter of 2016, 2015 and 2014, CEMEX performed its annual goodwill impairment test. Based on these analyses, CEMEX did not determine impairment losses of goodwill in any of the reported periods.

CEMEX's pre-tax discount rates and long-term growth rates used to determine the discounted cash flows in the group of CGUs with the main goodwill balances were as follows:

		Discount rates				
Groups of CGUs	2016	2015	2014	2016	2015	2014
United States	8.6%	8.6%	8.7%	2.5%	2.5%	2.5%
Spain	9.5%	9.9%	10.1%	1.6%	1.9%	2.0%
Mexico	9.8%	9.6%	9.7%	2.9%	3.5%	3.8%
Colombia	10.0%	9.8%	9.7%	4.0%	4.0%	3.0%
France	9.1%	9.0%	9.2%	1.8%	1.6%	1.7%
United Arab Emirates	10.2%	10.2%	10.4%	3.4%	3.6%	3.4%
United Kingdom	8.8%	8.8%	9.0%	1.9%	2.3%	2.4%
Egypt	11.4%	12.5%	11.6%	6.0%	4.6%	4.0%
Range of rates in other						
countries	.1% - 12.8%	9.0% - 13.8%	9.2% - 14.0%	2.2% - 7.0%	2.4% - 4.3%	2.1% - 4.9%

As of December 31, 2016, the discount rates used by CEMEX in its cash flows projections remained relatively flat in the countries with the most significant goodwill balances as compared to the values determined in 2015. During the year, the funding cost observed in industry decreased from 6.9% in 2015 to 6.2% in 2016, and the risk

### Analysis of goodwill impairment — continued

free rate also decreased from approximately 3.2% in 2015 to 2.7% in 2016. These reductions were partially offset by overall increases in the sovereign risk rate of the majority of the countries as well as in the risk multiple associated to the Company which increased from 1.08 in 2015 to 1.29 in 2016. As of December 31, 2015, the discount rates remained almost flat in most cases as compared to the values determined in 2014. Among other factors, the funding cost observed in industry increased from 6.1% in 2014 to 6.9% in 2015, and the risk free rate increased from approximately 3.1% in 2014 to 3.2% in 2015. Nonetheless, these increases were offset by reductions in 2015 in the country specific sovereign yields in the majority of the countries where CEMEX operates. As of December 31, 2014, the discount rates decreased mainly as a result of the reduction of the funding cost as compared to the prior year and the reduction in the risk free rate, significant assumptions in the determination of the discount rates. In respect to long-term growth rates, following general practice under IFRS, CEMEX uses country specific rates, which are mainly obtained from the Consensus Economics, a compilation of analysts' forecast worldwide, or from the International Monetary Fund when the first are not available for a specific country.

In connection with the assumptions included in the table above, CEMEX made sensitivity analyses to changes in assumptions, affecting the value in use of all groups of CGUs with an independent reasonable possible increase of 1% in the pre-tax discount rate, and an independent possible decrease of 1% in the long-term growth rate. In addition, CEMEX performed cross-check analyses for reasonableness of its results using multiples of Operating EBITDA. In order to arrive at these multiples, which represent a reasonableness check of the discounted cash flow models, CEMEX determined a weighted average multiple of Operating EBITDA to enterprise value observed in the industry. The average multiple was then applied to a stabilized amount of Operating EBITDA and the result was compared to the corresponding carrying amount for each group of CGUs to which goodwill has been allocated. CEMEX considered an industry weighted average Operating EBITDA multiple of 9.0 times in 2016 and 2015, respectively; and 9.5 times in 2014. CEMEX's own Operating EBITDA multiple was 8.9 times in 2016, 8.7 times in 2015 and 10.9 times in 2014. The lowest multiple observed in CEMEX's benchmark was 5.9 times in 2016, 5.8 times in 2015 and 6.0 times in 2014, and the highest being 18.3 times in 2016, 18.0 times in 2015 and 16.4 times in 2014.

As of December 31, 2016, 2015 and 2014, none of CEMEX's sensitivity analyses resulted in a relative impairment risk in CEMEX's operating segments. CEMEX continually monitors the evolution of the specific CGUs to which goodwill has been allocated that have presented relative goodwill impairment risk in any of the reported periods and, in the event that the relevant economic variables and the related cash flows projections would be negatively affected, it may result in a goodwill impairment loss in the future.

CEMEX market capitalization has been affected over several years after the 2008 global crisis, which CEMEX believes is due to several factors, among others: a) the slower recovery of the construction industry in the United States, one of CEMEX's main markets, which suffered one of the most deepest recessions since the Great Depression, which also significantly affected CEMEX's operations in key countries and regions such as Mexico and Europe, and consequently CEMEX's overall generation of cash flows; b) CEMEX's significant amount of consolidated debt, which generates uncertainty regarding CEMEX's ability to meet its financial obligations; and c) the generalized capital outflows from Emerging Markets securities, such as Mexico and Colombia, to safer assets in developed countries such as the United States. In dollar terms, CEMEX's market capitalization as of December 31, 2016 was approximately US\$11.2 billion (Ps232.2 billion), reflecting an increase of approximately 52% as compared to 2015, which was mainly generated by initiatives taken by CEMEX to increase free cash flow from its operations and asset divestments aimed to reduce indebtedness and financial leverage, along with a

### Analysis of goodwill impairment — continued

reduction of risk aversion across global financial markets as U.S. stock indexes reached to new all-time highs and international oil prices partially recovered during 2016 amid reduced global growth concerns, despite the continued depreciation of Emerging Markets currencies against the dollar in 2016 and continued uncertainty of the pace and timing of actions to increase interest rates in the United States. CEMEX market capitalization decreased approximately 41% in 2015 compared to 2014 to approximately US\$7.4 billion (Ps126.8 billion), due to the continuing significant depreciation of the Emerging Markets currencies against the dollar in 2015, which intensified in the second half of the year, driven by the material reduction in the international oil prices, uncertainty generated by the pace and timing of actions to increase interest rates in the United States, China growth concerns, lower global growth expectations and the uncertainty of CEMEX's income in US dollar terms from its operations in Emerging Markets such as Mexico and Colombia, countries with important dependence of oil revenues in its government budgets, which may result in the cancellation or delay of government infrastructure projects.

As of December 31, 2016 and 2015, goodwill allocated to the United States accounted for approximately 79% and 80%, respectively, of CEMEX's total amount of consolidated goodwill. In connection with CEMEX's determination of value in use relative to its groups of CGUs in the United States in the reported periods, CEMEX has considered several factors, such as the historical performance of such operating segment, including operating losses in recent years, the long-term nature of CEMEX's investment, the signs of recovery in the construction industry over the last three years, the significant economic barriers for new potential competitors considering the high investment required, and the lack of susceptibility of the industry to technology improvements or alternate construction products, among other factors. CEMEX has also considered recent developments in its operations in the United States, such as the increases in ready-mix concrete volumes of approximately 1% in 2016, 13% in 2015 and 2% in 2014, and the increases in ready-mix concrete prices of approximately 1% in 2016, 5% in 2015 and 8% in 2014, which are key drivers for cement consumption and CEMEX's profitability, and which trends are expected to continue over the next few years, as anticipated in CEMEX's cash flow projections.

#### 16) FINANCIAL INSTRUMENTS

### 16A) SHORT-TERM AND LONG-TERM DEBT

As of December 31, 2016 and 2015, CEMEX's consolidated debt summarized by interest rates and currencies, was as follow:

		2016				2015				
		Short-term	Long-term	Total		Short-term	Long-term	Total		
Floating rate debt	Ps	519	64,550	65,069	Ps	176	62,319	62,495		
Fixed rate debt		697	170,466	171,163		_42	166,806	166,848		
	Ps	1,216	235,016	236,232	Ps	218	229,125	229,343		
Effective rate <sup>1</sup>										
Floating rate		9.7%	4.4%	)		5.5%	4.0%	)		
Fixed rate		4.4%	6.5%	)		1.5%	7.0%	)		

### Short-term and long-term debt — continued

			2016					2015					
Currency		Short- term	Long- term	Total	Effective rate 1		Short- term	Long- term	Total	Effective rate <sup>1</sup>			
Dollars	Ps	114	179,675	179,789	6.3%	Ps	87	187,427	187,514	6.5%			
Euros		50	55,292	55,342	4.3%		38	40,954	40,992	4.8%			
Pesos		648	_	648	4.4%		_	627	627	4.4%			
Other currencies		404	49	453	10.2%		93	117	210	6.3%			
	Ps	1,216	235,016	236,232		Ps	218	229,125	229,343				

<sup>1</sup> In 2016 and 2015, represents the weighted average interest rate of the related debt agreements.

As of December 31, 2016 and 2015, CEMEX's consolidated debt summarized by type of instrument, was as follow:

2016	Short- term	Long- term	2015	Short- term	Long- term
Bank loans			Bank loans		
Loans in foreign countries, 2017 to			Loans in foreign countries, 2016 to		
2022 Ps	255	1,090	2022 Ps	78	996
Syndicated loans, 2017 to 2020	36	57,032	Syndicated loans, 2016 to 2020	31	52,825
	291	58,122		109	53,821
Notes payable			Notes payable		
Notes payable in Mexico, 2017			Notes payable in Mexico, 2016 to		
	_	648	2017	_	627
Medium-term notes, 2017 to 2026	_	173,656	Medium-term notes, 2016 to 2025	_	171,988
Other notes payable, 2017 to 2025	173	3,342	Other notes payable, 2016 to 2025	_23	2,775
	173	177,646		23	175,390
Total bank loans and notes payable	464	235,768	Total bank loans and notes payable	132	229,211
Current maturities	752	(752)	Current maturities	86	(86)
Ps	1,216	235,016	Ps	<u>218</u>	229,125

As of December 31, 2016 and 2015, discounts, fees and other direct costs incurred in the issuance of CEMEX's outstanding notes payable for approximately US\$84 and US\$108, respectively, adjust the balance of payable instruments, and are amortized to financing expense over the maturity of the related debt instruments.

# CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

### Short-term and long-term debt — continued

Changes in consolidated debt for the years ended December 31, 2016, 2015 and 2014 were as follows:

		2016	2015	2014
Debt at beginning of year	Ps	229,343	205,834	190,980
Proceeds from new debt instruments		48,748	52,764	72,534
Debt repayments		(85,798)	(64,237)	(79,248)
Foreign currency translation and inflation effects		43,939	34,982	21,568
Debt at end of year	Ps	236,232	229,343	205,834

As of December 31, 2016 and 2015, as presented in the table above of debt by type of instrument, approximately 25% and 24%, respectively, of CEMEX's total indebtedness, was represented by bank loans, of which the most significant portion corresponded to those balances under CEMEX's facilities agreement entered into on September 29, 2014, as amended several times in 2015 and 2016 (the "Credit Agreement") of approximately US\$2,745 (Ps56,879) in 2016 and US\$3,062 (Ps52,763) in 2015.

In addition, as of December 31, 2016 and 2015, as presented in the table above of debt by type of instrument, approximately 75% and 76%, respectively, of CEMEX's total indebtedness, was represented by notes payable, of which, the most significant portion was long-term in both periods. As of December 31, 2016 and 2015, CEMEX's long-term notes payable are detailed as follows:

	Date of			Principal		Maturity	Repurchased amount	Outstanding amount <sup>3</sup>		
Description	issuance	Issuer 1, 2	Currency	amount	Rate 1	date	US\$	US\$	2016	2015
April 2026 Notes 4	16/Mar/16	CEMEX, S.A.B. de C.V.	Dollar	1,000	7.75%	16/Apr/26		1,000	Ps 20,631	
July 2025 Notes	02/Apr/03	CEMEX Materials, LLC	Dollar	150	7.70%	21/Jul/25	_	150	3,249	2,720
		CEMEX Colombia, S.A.	COP	10,000	8.30%	08/Jul/25	(3)	_	_	55
March 2025 Notes 5	03/Mar/15	CEMEX, S.A.B. de C.V.	Dollar	750	6.125%	05/May/25	_	750	15,488	12,866
January 2025 Notes 6	11/Sep/14	CEMEX, S.A.B. de C.V.	Dollar	1,100	5.70%	11/Jan/25	(29)	1,071	22,124	18,382
June 2024 Notes	14/Jun/16	CEMEX Finance LLC	Euro	400	4.625%	15/Jun/24	_	421	8,665	_
April 2024 Notes	01/Apr/14	CEMEX Finance LLC	Dollar	1,000	6.00%	01/Apr/24	(10)	990	19,886	16,483
March 2023 Notes 5	03/Mar/15	CEMEX, S.A.B. de $C.V.$	Euro	550	4.375%	05/Mar/23	_	579	11,948	10,251
October 2022 Notes 4	12/Oct/12	CEMEX Finance LLC	Dollar	1,500	9.375%	12/Oct/22	(444)	1,056	21,738	24,634
January 2022 Notes 6	11/Sep/14	CEMEX, S.A.B. de C.V.	Euro	400	4.75%	11/Jan/22	_	421	8,696	7,462
April 2021 Notes	01/Apr/14	CEMEX Finance LLC	Euro	400	5.25%	01/Apr/21	_	421	8,679	7,448
January 2021 Notes 4	02/Oct/13	CEMEX, S.A.B. de C.V.	Dollar	1,000	7.25%	15/Jan/21	(273)	727	14,845	17,009
December 2019										
Notes 4	12/Aug/13	CEMEX, S.A.B. de C.V.	Dollar	1,000	6.50%	10/Dec/19	(292)	708	14,471	16,764
April 2019 USD										
Notes	28/Mar/12	CEMEX España, S.A.	Dollar	704	9.875%	30/Apr/19	(704)	_	_	10,702
April 2019 Euro										
Notes	28/Mar/12	CEMEX España, S.A.	Euro	179	9.875%	30/Apr/19	(188)	_	_	3,355
	25/Mar/13	CEMEX, S.A.B. de C.V.	Dollar	600	5.875%	25/Mar/19	(600)	_	_	10,302
October 2018 Variable										
Notes 4	02/Oct/13	CEMEX, S.A.B. de C.V.	Dollar	500	L+475bps	15/Oct/18	(187)	313	6,485	8,564
June 2018 Notes	17/Sep/12	CEMEX, S.A.B. de C.V.	Dollar	500	9.50%	15/Jun/18	(500)	_	_	7,702
November 2017										
Notes	30/Nov/07	CEMEX, S.A.B. de C.V.	Peso	627	4.40%	17/Nov/17	(292)	30	648	627
Other notes payable									93	64
									Ps 177,646	175.390
									====	====

# Short-term and long-term debt — continued

- In all applicable cases the issuer refers to CEMEX España, S.A. acting through its Luxembourg Branch. The letter "L" included above refers to LIBOR, which represents the London Inter-Bank Offered Rate, variable rate used in international markets for debt denominated in U.S. dollars. As of December 31, 2016 and 2015, 3-Month LIBOR rate was 0.9979% and 0.6127%, respectively. The contraction "bps" means basis points. One hundred basis points equal 1%.
- 2 Unless otherwise indicated, all issuances are fully and unconditionally guaranteed by CEMEX, S.A.B. de C.V., CEMEX México, S.A. de C.V., CEMEX Concretos, S.A. de C.V., Empresas Tolteca de México, S.A. de C.V., New Sunward Holding B.V., CEMEX España, S.A., CEMEX Asia, B.V., CEMEX Corp., CEMEX Egyptian Investments, B.V., CEMEX Finance LLC, CEMEX France Gestion, (S.A.S.), CEMEX Research Group AG and CEMEX UK. CEMEX Egyptian Investments II, B.V. and CEMEX Shipping, B.V. originally guaranteed the issuances listed above but were merged into CEMEX España, S.A. on October 3, 2016.
- 3 Presented net of all outstanding notes repurchased and held by CEMEX's subsidiaries.
- 4 On May 9, 2016, using available funds from the issuance of the April 2026 Notes, the sale of assets and cash flows provided by operating activities, and by means of tender offers, CEMEX completed the purchase of approximately US\$178 principal amount of the October 2018 Variable Notes, and the purchase of approximately US\$219 principal amount of the December 2019 Notes. In addition, on July 28, 2016, CEMEX repurchased additional US\$355 principal amount of the October 2022 Notes. Moreover, on October 28, 2016, CEMEX repurchased US\$242 principal amount of the January 2021 Notes.
- 5 On March 30, 2015, in connection with the issuance of the March 2023 Notes and the March 2025 Notes, CEMEX repurchased US\$344 of the remaining principal amount of the then outstanding January 2018 Notes. In addition, on May 15, 2015, CEMEX repurchased US\$213 of the remaining principal amount of the then outstanding May 2020 Notes, and on June 30, 2015, the purchase of the remaining principal amount for US\$746 of the then outstanding September 2015 Variable Notes.
- 6 On January 11, 2015, in connection with the issuance of the January 2025 Notes and the January 2022 Notes, CEMEX completed the purchase of additional US\$217 principal amount of the then outstanding January 2018 Notes.

During 2016, 2015 and 2014, as a result of the debt transactions incurred by CEMEX mentioned above, including exchange offers and tender offers to replace and/or repurchase existing debt instruments, CEMEX paid combined premiums, fees and issuance costs for approximately US\$196 (Ps4,061), US\$61 (Ps1,047) and US\$232 (Ps3,107), respectively, of which approximately US\$151 (Ps3,129) in 2016, US\$35 (Ps604) in 2015 and US\$167 (Ps2,236) in 2014, associated with the extinguished portion of the exchanged or repurchased notes, were recognized in the statement of operations in each year within "Financial expense". In addition, approximately US\$8 (Ps166) in 2016, US\$26 (Ps443) in 2015 and US\$65 (Ps871) in 2014, corresponding to issuance costs of new debt and/or the portion of the combined premiums, fees and issuance costs treated as a refinancing of the old instruments by considering that: a) the relevant economic terms of the old and new notes were not substantially different; and b) the final holders of the new notes were the same of such portion of the old notes; adjusted the carrying amount of the new debt instruments, and are amortized over the remaining term of each instrument. Moreover, proportional fees and issuance costs related to the extinguished debt instruments for approximately US\$37 (Ps767) in 2016, US\$31 (Ps541) in 2015 and US\$87 (Ps1,161) in 2014 that were pending for amortization were recognized in the statement of operations of each year as part of "Financial expense".

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

# Short-term and long-term debt — continued

The maturities of consolidated long-term debt as of December 31, 2016, were as follows:

		2016
2018	Ps	22,802
2019		32,638
2020		22,492
2021		23,525
2022 and thereafter		133,559
	Ps	235,016

As of December 31, 2016, CEMEX had the following lines of credit, the majority of which are subject to the banks' availability, at annual interest rates ranging between 1.25% and 6.50%, depending on the negotiated currency:

		Lines of credit	Available
Other lines of credit in foreign subsidiaries	Ps	9,601	7,230
Other lines of credit from banks		5,834	5,834
	Ps	15,435	13,064

#### Credit Agreement, Facilities Agreement and Financing Agreement

On September 29, 2014, CEMEX entered into the Credit Agreement for US\$1,350 with nine of the main participating banks under its Facilities Agreement. The proceeds from the Credit Agreement were used to repay US\$1,350 of debt under the then existing Facilities Agreement entered into on September 17, 2012, as amended from time to time (the "Facilities Agreement"). In addition, on November 3, 2014, CEMEX received US\$515 of additional commitments from banks that agreed to join the Credit Agreement, increasing the total principal amount to US\$1,865. The incremental amount was applied to partially prepay the Facilities Agreement and other debt. Considering the aforementioned reductions to the Facilities Agreement, along with the repayment on September 12, 2014 of US\$350 of debt under the Facilities Agreement using the proceeds from the January 2025 Notes, as of December 31, 2014, the total outstanding amount under the Facilities Agreement was approximately US\$2,050, scheduled to mature in 2017. On July 30, 2015, CEMEX repaid in full the then total amount outstanding of approximately US\$1,937 (Ps33,375) under the Facilities Agreement with new funds from 21 financial institutions, which joined the Credit Agreement under new tranches, allowing CEMEX to increase the average life of its syndicated bank debt to approximately 4 years as of such date. The tranches share the same guarantors and collateral package as the original tranches under the Facilities Agreement. On September 21, 2015 three additional financial institutions provided additional commitments for approximately US\$30. As of December 31, 2015, total commitments under the Credit Agreement included approximately €621 (US\$675 or Ps11,624) and approximately US\$3,149 (Ps54,257), out of which about US\$735 (Ps12,664) were in a revolving credit facility. At the same date, the Credit Agreement had an amortization profile, considering all commitments, of approximately 10% in 2017; 25% in 2018; 25% in 2019; and 40% in 2020. On November 30, 2016, CEMEX prepaid US\$373 (Ps7,729) corresponding to the September 2017 amortization under the Credit Agreement and agreed with the lenders to exchange current funded commitments for US\$664 maturing in 2018 into the revolving facility, maintaining their original amortization schedule and the same terms and conditions.

### Credit Agreement, Facilities Agreement and Financing Agreement — continued

As of December 31, 2016, total commitments under the Credit Agreement amounted to approximately €746 (US\$785 or Ps16,259) and approximately US\$2,826 (Ps58,555), out of which approximately US\$1,413 (Ps29,277) were in the revolving credit facility. At the same date, the Credit Agreement had an amortization profile, considering all commitments, of approximately US\$783 in 2018; US\$883 in 2019; and US\$1,096 in 2020.

On August 14, 2009, CEMEX entered into a financing with its major creditors, as amended from time to time during 2009, 2010, 2011 and 2012 (the "Financing Agreement"), by means of which CEMEX extended the maturities of US\$14,961 of syndicated loans, private placement notes and other obligations. After the application of the proceeds from several refinancing transactions, the sale of assets, and a Parent Company's equity offering in 2009, in September 2012, CEMEX entered into the Facilities Agreement pursuant to an exchange with the creditors under the Financing Agreement of their existing loans and private placement notes for new loans and new private placement notes of approximately US\$6,155 maturing in February 2017, US\$500 of the June 2018 Notes and approximately US\$525 of loans and private placement notes remained outstanding under the existing Financing Agreement. Subsequently, after the application in 2012 of proceeds resulting from the October 2022 Notes, the aggregate principal amount of loans and U.S. dollar private placement notes under the amended Financing Agreement decreased to US\$55. This amount was repaid in full in March 2013 with proceeds from the issuance of the March 2019 Notes.

All tranches under the Credit Agreement have substantially the same terms, including an applicable margin over LIBOR of between 250 to 425 basis points, depending on the leverage ratio (as defined below) of CEMEX, as follows:

Consolidated leverage ratio	Applicable margin
> 5.50x	425 bps
< 5.50 x > 5.00	350 bps
< 5.00 x > 4.50	325 bps
< 4.50x > 4.00	300 bps
< 4.00x > 3.50	275 bps
< 3.50x	250 bps

In February 2016, CEMEX launched a consent request to lenders under the Credit Agreement, in connection with its plan to sell a non-controlling interest in CHP, main holding company of CEMEX's operations in the Philippines (notes 4C and 20D). On March 7, 2016, CEMEX obtained such consent. Jointly with this consent, in respect to the table above, some amendments were applicable to the Credit Agreement. Such amendments are in connection with the consolidated leverage ratio on the applicable margin over LIBOR. If the consolidated leverage ratio exceeds 5.50 times on December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, the applicable margin over LIBOR would be 425 bps instead of 400 bps. The amendments also modify the consolidated leverage ratio limits as described in the financial covenants section.

For the years ended December 31, 2016 and 2015, under the Credit Agreement, CEMEX observed the following thresholds: (a) the aggregate amount allowed for capital expenditures cannot exceed US\$1,000 per year excluding certain capital expenditures, and, joint venture investments and acquisitions by CHP and its subsidiaries and CLH and its subsidiaries, which capital expenditures, joint venture investments and acquisitions at any time then incurred are subject to a separate aggregate limit for each of CHP and CLH of US\$500 (or its

### Credit Agreement, Facilities Agreement and Financing Agreement — continued

equivalent); and (b) the amounts allowed for permitted acquisitions and investments in joint ventures cannot exceed US\$400 per year. Nonetheless, such limitations do not apply if capital expenditures or acquisitions are funded with equity, equity-like issuances or asset disposals proceeds.

The debt under the Credit Agreement and previously under the Facilities Agreement is guaranteed by CEMEX México, S.A. de C.V., CEMEX Concretos, S.A. de C.V., Empresas Tolteca de México, S.A. de C.V., New Sunward Holding B.V., CEMEX España, S.A., CEMEX Asia, B.V., CEMEX Corp., CEMEX Egyptian Investments, B.V., CEMEX Finance LLC, CEMEX France Gestion, (S.A.S.), CEMEX Research Group AG and CEMEX UK. In addition, the debt under such agreements (together with all other senior capital markets debt issued or guaranteed by CEMEX, and certain other precedent facilities) is also secured by a first-priority security interest in: (a) substantially all the shares of CEMEX México, S.A. de C.V., CEMEX Operaciones México, S.A. de C.V, New Sunward Holding B.V., CEMEX Trademarks Holding Ltd. and CEMEX España, S.A. (the "Collateral"); and (b) all proceeds of such Collateral. CEMEX Egyptian Investments II, B.V. and CEMEX Shipping, B.V. originally guaranteed the Credit Agreement but were merged into CEMEX España, S.A. on October 3, 2016.

In addition to the restrictions mentioned above, and subject in each case to the permitted negotiated amounts and other exceptions, CEMEX is also subject to a number of negative covenants that, among other things, restrict or limit its ability to: (i) create liens; (ii) incur additional debt; (iii) change CEMEX's business or the business of any obligor or material subsidiary (in each case, as defined in the Credit Agreement and the Facilities Agreement); (iv) enter into mergers; (v) enter into agreements that restrict its subsidiaries' ability to pay dividends or repay intercompany debt; (vi) acquire assets; (vii) enter into or invest in joint venture agreements; (viii) dispose of certain assets; (ix) grant additional guarantees or indemnities; (x) declare or pay cash dividends or make share redemptions; (xi) enter into certain derivatives transactions; and (xii) exercise any call option in relation to any perpetual bonds CEMEX issues unless the exercise of the call options does not have a materially negative impact on its cash flow. The Credit Agreement contains a number of affirmative covenants that, among other things, require CEMEX to provide periodic financial information to its lenders. However, a number of those covenants and restrictions will automatically cease to apply or become less restrictive if CEMEX so elects when (i) CEMEX's Leverage Ratio (as defined hereinafter) for the two most recently completed quarterly testing periods is less than or equal to 4.0 times; and (ii) no default under the Credit Agreement is continuing. At that point the Leverage Ratio must not exceed 4.25 times. Restrictions that will cease to apply when CEMEX satisfies such conditions include the capital expenditure limitations mentioned above and several negative covenants, including limitations on CEMEX's ability to declare or pay cash dividends and distributions to shareholders, limitations on CEMEX's ability to repay existing financial indebtedness, certain asset sale restrictions, certain mandatory prepayment provisions, and restrictions on exercising call options in relation to any perpetual bonds CEMEX issues. At such time, several baskets and caps relating to negative covenants will also increase, including permitted financial indebtedness, permitted guarantees and limitations on liens. However, CEMEX cannot assure that it will be able to meet the conditions for these restrictions to cease to apply prior to the final maturity date under the Credit Agreement.

In addition, the Credit Agreement contains events of default, some of which may occur and are outside of CEMEX's control such as expropriation, sequestration and availability of foreign exchange. As of December 31, 2016 and 2015, CEMEX was not aware of any event of default. CEMEX cannot assure that it will be able to comply with the restrictive covenants and limitations contained in the Credit Agreement. CEMEX's failure to comply with such covenants and limitations could result in an event of default, which could materially and adversely affect CEMEX's business and financial condition.

# Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### **Financial Covenants**

The Credit Agreement and previously the Facilities Agreement requires CEMEX the compliance with financial ratios, which mainly include: a) the consolidated ratio of debt to Operating EBITDA (the "Leverage Ratio"); and b) the consolidated ratio of Operating EBITDA to interest expense (the "Coverage Ratio"). These financial ratios are calculated according to the formulas established in the debt contracts using the consolidated amounts under IFRS. Considering the amendments of March 7, 2016 mentioned above. As of December 31, 2016, CEMEX must comply with a Coverage ratio and a Leverage ratio for each period of four consecutive fiscal quarters as follows:

Period	Coverage ratio	Period	Leverage ratio
For the period ending on December 31, 2016 up to and including the period ending on March 31, 2017	>= 1.85	For the period ending on December 31, 2016 up to and including the period ending on March 31, 2017	< = 6.00 < = 5.75
For the period ending on June 30, 2017 up to and including the period ending on September 30, 2017	>= 2.00	For the period ending on December 31, 2017 up to and including the period ending on March 31, 2018	<= 5.50
2017	2.00	For the period ending on June 30, 2018 up to and including the period ending on September 30, 2018	<= 5.25
For the period ending on December 31, 2017 and each subsequent reference period	> = 2.25	For the period ending on December 31, 2018 up to and including the period ending on	5.00
		March 31, 2019	<= 5.00
		2019	< = 4.50
		March 31, 2020	< = 4.25
		subsequent reference period	<= 4.00

CEMEX's ability to comply with these ratios may be affected by economic conditions and volatility in foreign exchange rates, as well as by overall conditions in the financial and capital markets. For the compliance periods ended as of December 31, 2016, 2015 and 2014, taking into account the Credit Agreement and the Facilities Agreement, as applicable, CEMEX was in compliance with the financial covenants imposed by its debt contracts. The main consolidated financial ratios as of December 31, 2016, 2015 and 2014 were as follows:

		Consolidated Illiancial Fatios				
		2016	2015	2014		
Leverage ratio 1,2	Limit	=< 6.00	=< 6.00	=< 6.50		
	Calculation	4.22	5.21	5.19		
Coverage ratio <sup>3</sup>	Limit	=> 1.85	=> 1.85	=> 1.75		
	Calculation	3.18	2.61	2.34		

Consolidated financial ratios

The leverage ratio is calculated in pesos by dividing "Funded debt" by pro forma Operating EBITDA for the last twelve months as of the calculation date. Funded debt equals debt, as reported in the balance sheet excluding finance leases, components of liability of convertible subordinated notes, plus perpetual

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Financial Covenants — continued

- debentures and guarantees, plus or minus the fair value of derivative financial instruments, as applicable, among other adjustments.
- 2 Pro forma Operating EBITDA represents, all calculated in pesos, Operating EBITDA for the last twelve months as of the calculation date, plus the portion of Operating EBITDA referring to such twelve-month period of any significant acquisition made in the period before its consolidation in CEMEX, minus Operating EBITDA referring to such twelve-month period of any significant disposal that had already been liquidated.
- 3 The coverage ratio is calculated in pesos using the amounts from the financial statements, by dividing the pro forma operating EBITDA by the financial expense for the last twelve months as of the calculation date. Financial expense includes interest accrued on the perpetual debentures.

CEMEX will classify all of its outstanding debt as current debt in its balance sheet if: 1) as of any measurement date CEMEX fails to comply with the aforementioned financial ratios; or 2) the cross default clause that is part of the Credit Agreement is triggered by the provisions contained therein; 3) as of any date prior to a subsequent measurement date CEMEX expects not to be in compliance with such financial ratios in the absence of: a) amendments and/or waivers covering the next succeeding 12 months; b) high probability that the violation will be cured during any agreed upon remediation period and be sustained for the next succeeding 12 months; and/or c) a signed refinancing agreement to refinance the relevant debt on a long-term basis. Moreover, concurrent with the aforementioned classification of debt in the short-term, the noncompliance of CEMEX with the financial ratios agreed upon pursuant to the Credit Agreement or, in such event, the absence of a waiver of compliance or a negotiation thereof, after certain procedures upon CEMEX's lenders' request, they would call for the acceleration of payments due under the Credit Agreement. That scenario will have a material adverse effect on CEMEX's liquidity, capital resources and financial position.

#### 16B)OTHER FINANCIAL OBLIGATIONS

As of December 31, 2016 and 2015, other financial obligations in the consolidated balance sheet are detailed as follows:

	2016				2015			
	Short-term	Long-term	Total		Short-term	Long-term	Total	
I. Convertible subordinated notes due 2020 P	s —	10,417	10,417	Ps	_	8,569	8,569	
II. Convertible subordinated notes due 2018	_	13,575	13,575		_	10,826	10,826	
II. Convertible subordinated notes due 2016	_	_			6,007	_	6,007	
III. Mandatory convertible securities 2019	278	689	967		239	961	1,200	
IV. Liabilities secured with accounts								
receivable	11,095	_	11,095		9,071	1,430	10,501	
V. Capital leases	285	1,291	1,576		270	1,482	1,752	
Ps	11,658	25,972	37,630	Ps	15,587	23,268	38,855	

Financial instruments convertible into CEMEX's shares contain components of liability and equity, which are recognized differently depending upon the currency in which the instrument is denominated and the functional currency of the issuer (note 2F).

### I. Optional convertible subordinated notes due 2020

During 2015, the Parent Company issued US\$521 aggregate principal amount of 3.72% convertible subordinated notes due in March 2020 (the "2020 Convertible Notes"). The 2020 Convertible Notes were issued: a) US\$200 as a result of the exercise in March 13, 2015 of US\$200 notional amount of Contingent Convertible Units ("CCUs") (described below), and b) US\$321 as a result of the exchange with certain investors in May 2015, which together with early conversions, resulted in settlement of approximately US\$626 aggregate principal amount of 3.25% convertible subordinated notes due in 2016 (the "2016 Convertible Notes") held by such investors and the issuance and delivery by CEMEX of an estimated 42 million ADSs, which included a number of additional ADSs issued to the holders as non-cash inducement premiums. The 2020 Convertible Notes, which are subordinated to all of CEMEX's liabilities and commitments, are convertible into a fixed number of CEMEX's ADSs at any time at the holder's election and are subject to antidilution adjustments. The difference at the exchange date between the fair value of the 2016 Convertible Notes and the 42 million ADSs against the fair value of the 2020 Convertible Notes represented a loss of approximately Ps365 recognized in 2015 as part of "Other financial income (expense), net". The aggregate fair value of the conversion option as of the issuance dates which amounted to approximately Ps199 was recognized in other equity reserves. As of December 31, 2016 and 2015, the conversion price per ADS was approximately 11.45 dollars and 11.90 dollars, respectively. After antidilution adjustments, the conversion rate as of December 31, 2016 and 2015 was 87.3646 ADS and 84.0044 ADS per each 1 thousand dollars principal amount of such notes, respectively.

#### II. Optional convertible subordinated notes due in 2016 and 2018

On March 15, 2011, CEMEX, S.A.B. de C.V. closed the offering of US\$978 aggregate principal amount of the 2016 Convertible Notes and US\$690 principal amount of 3.75% convertible subordinated notes due in 2018 (the "2018 Convertible Notes"). The notes were subordinated to all of CEMEX's liabilities and commitments. The notes are convertible into a fixed number of CEMEX's ADSs, and are subject to antidilution adjustments. After the exchange of notes described in the paragraph above, as of December 31, 2015, US\$352 of the 2016 Convertible Notes remained outstanding, which were repaid in cash at their maturity on March 15, 2016. As of December 31, 2016 and 2015, the conversion price per ADS of the notes then outstanding was approximately 8.92 dollars and 9.27 dollars, respectively. After antidilution adjustments, the conversion rate as of December 31, 2016 and 2015 was 112.1339 ADS and 107.8211 ADS, respectively, per each 1 thousand dollars principal amount of such notes. Concurrent with the offering, a portion of the net proceeds from this transaction were used to fund the purchase of capped call options, which are generally expected to reduce the potential dilution cost to CEMEX upon the potential conversion of such notes (note 16D).

### III. Mandatorily convertible securities due in 2019

In December 2009, the Parent Company exchanged debt into approximately US\$315 principal amount of 10% mandatorily convertible securities in pesos with maturity in 2019 (the "2019 Mandatorily Convertible Securities"). Reflecting antidilution adjustments, the notes will be converted at maturity or earlier if the price of the CPO reaches approximately Ps29.50 into approximately 210 million CPOs at a conversion price of approximately Ps19.66 per CPO. Holders have an option to voluntarily convert their securities on any interest payment date into CPOs. The conversion option embedded in these securities is treated as a stand-alone derivative liability at fair value through the statement of operations (note 16D).

#### IV. Liabilities secured with accounts receivable

As mentioned in note 9, as of December 31, 2016 and 2015, CEMEX maintained securitization programs for the sale of trade accounts receivable established in Mexico, the United States, France and the United Kingdom, by means of which, CEMEX effectively surrenders control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets. However, considering that CEMEX retains certain residual interest in the programs and/or maintains continuing involvement with the accounts receivable, the funded amounts of the trade receivables sold are recognized in "Other financial obligations", and the receivables sold are maintained in the balance sheet.

#### V. Capital leases

CEMEX has several operating and administrative assets, including buildings and mobile equipment, under capital lease contracts. Future payments associated with these contracts are presented in note 23E.

### Optional convertible subordinated notes due in 2015

On March 30, 2010, the Parent Company issued US\$715 aggregate principal amount of 4.875% Optional Convertible Subordinated Notes due 2015 (the "2015 Convertible Notes"), which were subordinated to all of CEMEX's liabilities and commitments, and were convertible into a fixed number of CEMEX's ADSs, at the holder's election considering antidilution adjustments. As of December 31, 2014, the conversion price per ADS was approximately 11.18 dollars. After antidilution adjustments, the conversion rate as of December 31, 2014 was 89.4729 ADS per each 1 thousand dollars principal amount of such notes. Concurrent with the offering, a portion of the proceeds were used to enter into a capped call transaction that was expected to generally reduce the dilution cost to CEMEX upon the potential conversion of the notes (note 16D).

On several dates during 2014, CEMEX agreed the early conversion of approximately US\$511 in aggregate principal amount of the 2015 Convertible Notes in exchange for approximately 50.4 million ADSs, which included the number of additional ADSs issued to the holders as non-cash inducement premiums. As a result of the early conversion agreements the liability component of the converted notes of approximately Ps6,483, was reclassified from other financial obligations to other equity reserves. In addition, considering the issuance of shares, CEMEX increased common stock for Ps4 and additional paid-in capital for Ps8,037 against other equity reserves, and recognized expense for the inducement premiums of approximately Ps957, representing the fair value of the ADSs at the issuance dates, in the statement of operations in 2014 within "Other financial income (expense), net". As of December 31, 2014, the outstanding principal amount of the 2015 Convertible Notes was of approximately US\$204. In March 2015 CEMEX repaid at maturity the remaining balance of these notes as described in the paragraph below.

In October 2014, in connection with the 2015 Convertible Notes, the Parent Company issued US\$200 notional amount of CCUs at an annual rate of 3.0% on the notional amount, by means of which, in exchange for cupon payments, CEMEX secured the refinancing for any of the 2015 Convertible Notes that would mature without conversion up to US\$200 of the principal amount. Pursuant to the CCUs, holders invested the US\$200 in U.S. treasury bonds, and irrevocably agreed to apply such investment in March 2015, if necessary, to subscribe new convertible notes of the Parent Company for up to US\$200. As previously mentioned, in March 2015, CEMEX exercised the CCUs, issued US\$200 principal amount of the 2020 Convertible Notes to the holders of the CCUs and repaid the US\$204 remaining principal amount of the 2015 Convertible Notes described above.

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

# 16C) FAIR VALUE OF FINANCIAL INSTRUMENTS

#### Financial assets and liabilities

The carrying amounts of cash, trade accounts receivable, other accounts receivable, trade accounts payable, other accounts payable and accrued expenses, as well as short-term debt, approximate their corresponding estimated fair values due to the short-term maturity and revolving nature of these financial assets and liabilities. Cash equivalents and certain long-term investments are recognized at fair value, considering to the extent available, quoted market prices for the same or similar instruments. The estimated fair value of CEMEX's long-term debt is Level 2, and is either based on estimated market prices for such or similar instruments, considering interest rates currently available for CEMEX to negotiate debt with the same maturities, or determined by discounting future cash flows using market-based interest rates currently available to CEMEX. As of December 31, 2016 and 2015, the carrying amounts of financial assets and liabilities and their respective fair values were as follows:

	2016			2015		
	Carrying amount	Fair value		Carrying amount	Fair value	
Financial assets						
Derivative instruments (notes 13B and 16D)	1,900	1,900	Ps	869	869	
Other investments and non-current accounts receivable (note 13B)	5,149	5,149		5,680	5,537	
Ps	7,049	7,049	Ps	6,549	6,406	
Financial liabilities						
Long-term debt (note 16A)	235,016	241,968	Ps	229,125	220,662	
Other financial obligations (note 16B)	25,972	27,419		23,268	24,863	
Derivative instruments (notes 16D and 17)	818	818		178	178	
Ps	261,806	270,205	Ps	252,571	245,703	

### Fair Value Hierarchy

As of December 31, 2016 and 2015, assets and liabilities carried at fair value in the consolidated balance sheets are included in the following fair value hierarchy categories:

2016		Level 1	Level 2	Level 3	Total
Assets measured at fair value Derivative instruments (notes 13B and 16D) Investments available-for-sale (note 13B) Investments held for trading (note 13B)	Ps		1,900  		1,900 491 157
Liabilities measured at fair value	Ps	<del>491</del>	2,057	=	2,548
Derivative instruments (notes 16D and 17)	Ps	=	<u>818</u>	=	818
2015					
Assets measured at fair value					
Derivative instruments (notes 13B and 16D)	Ps	_	869	_	869
Investments available-for-sale (note 13B)		632	_		632
Investments held for trading (note 13B)		_	317	_	317
	Ps	<u>632</u>	1,186	_	1,818
Liabilities measured at fair value					
Derivative instruments (notes 16D and 17)	Ps	_	178	_	178

### CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### 16D) DERIVATIVE FINANCIAL INSTRUMENTS

During the reported periods, in compliance with the guidelines established by its Risk Management Committee, the restrictions set forth by its debt agreements and its hedging strategy (note 16E), CEMEX held derivative instruments, with the objectives of, as the case may be of: a) changing the risk profile or fixed the price of fuels and electric energy; b) foreign exchange hedging; and c) other corporate purposes. As of December 31, 2016 and 2015, the notional amounts and fair values of CEMEX's derivative instruments were as follows:

		2016			015
(U.S. dollars millions)		Notional amount	Fair value	Notional amount	Fair value
I. Interest rate swaps	US\$	147	23	157	28
II. Equity forwards on third party shares		—	_	24	6
III. Options on the Parent Company's own shares		576	26	1,145	12
IV. Foreign exchange forward contracts		80	_	173	(1)
V. Fuels price hedging		_77	_15	16	(3)
	US\$	880	_64	1,515	42

The fair values determined by CEMEX for its derivative financial instruments are Level 2. There is no direct measure for the risk of CEMEX or its counterparties in connection with the derivative instruments. Therefore, the risk factors applied for CEMEX's assets and liabilities originated by the valuation of such derivatives were extrapolated from publicly available risk discounts for other public debt instruments of CEMEX and its counterparties.

The caption "Other financial income (expense), net" includes gains and losses related to the recognition of changes in fair values of the derivative instruments during the applicable period and that represented net gains of US\$17 (Ps317) in 2016, net losses of US\$173 (Ps2,981) and of US\$46 (Ps679) in 2015 and 2014, respectively.

The estimated fair value of derivative instruments fluctuates over time and is determined by measuring the effect of future relevant economic variables according to the yield curves shown in the market as of the reporting date. These values should be analyzed in relation to the fair values of the underlying transactions and as part of CEMEX's overall exposure attributable to fluctuations in interest rates and foreign exchange rates. The notional amounts of derivative instruments do not represent amounts exchanged by the parties, and consequently, there is no direct measure of CEMEX's exposure to the use of these derivatives. The amounts exchanged are determined based on the basis of the notional amounts and other terms included in the derivative instruments.

#### I. Interest rate swap contracts

As of December 31, 2016 and 2015, CEMEX had an interest rate swap maturing in September 2022 associated with an agreement entered into by CEMEX for the acquisition of electric energy in Mexico, which fair value represented assets of US\$23 (Ps477) and US\$28 (Ps482), respectively. Pursuant to this instrument, during the tenure of the swap and based on its notional amount, CEMEX will receive a fixed rate of 5.4% and will pay LIBOR. Changes in the fair value of this interest rate swap generated losses of US\$6 (Ps112) in 2016, losses of US\$4 (Ps69) in 2015 and losses of US\$1 (Ps3) in 2014, recognized in profit or loss for each year.

### II. Equity forwards in third party shares

As of December 31, 2015, CEMEX held a forward contract to be settled in cash maturing in October 2016 over the price of 59.5 million CPOs of Axtel, a Mexican telecommunications company traded in the MSE. Changes in the fair value of this instrument generated losses of US\$2 (Ps30) in 2016, gains of US\$15 (Ps258) in 2015 and losses of US\$9 (Ps133) in 2014, recognized in profit or loss for each period. In October, 2015, Axtel announced its merger with Alestra, a Mexican entity provider of information technology solutions and member of Alfa Group which was effective beginning February 15, 2016. In connection with this merger, on January 6, 2016, CEMEX settled in cash the forward contract and received approximately US\$4, net of transaction costs. In a separate transaction, considering that as of December 31, 2015, CEMEX held an investment in Axtel that upon completion of the Alestra and Axtel merger would be exchanged proportionately according to the new ownership interests for shares in the new merged entity that will remain public and the attractive business outlook of such new entity, after the settlement of the Axtel forward contract, CEMEX decided to purchase in the market the 59.5 million CPOs of Axtel and incorporate them to its existing investment in Axtel as part of CEMEX's investments available for sale.

### III. Options on the Parent Company's own shares

On March 15, 2011, CEMEX, S.A.B. de C.V. entered into a capped call transaction, subject to antidilution adjustments, over 173 million CEMEX's ADSs (101 million ADSs maturing in March 2016 in connection with the 2016 Convertible Notes and 72 million ADSs maturing in March 2018 in connection with the 2018 Convertible Notes) in order to effectively increase the conversion price of the ADSs under such notes, by means of which, at maturity of the notes, originally CEMEX would receive in cash the excess between the market price and the strike price of approximately 9.65 dollars per ADS, with a maximum appreciation per ADS of approximately 4.45 dollars for the 2016 Convertible Notes and 5.94 dollars for the 2018 Convertible Notes. CEMEX paid aggregate premiums of approximately US\$222. During 2015, CEMEX amended a portion of the capped calls relating to the 2016 Convertible Notes and, as a result, CEMEX received approximately US\$44 in cash, equivalent to the unwind of 44.2% of the total notional amount of such capped call. On March 15, 2016, the remaining options for the 55.8% of the 2016 Convertible Notes expired out of the money. During August 2016, CEMEX amended the capped calls relating to the 2018 Convertible Notes and, as a result, the exercise price was adjusted to 8.92 dollars per ADS and the underlying to 6 million ADSs. As of December 31, 2016 and 2015, the fair value of the existing options represented an asset of approximately US\$66 (Ps1,368) and US\$22 (Ps379), respectively. Changes in the fair value of these instruments generated gains of US\$44 (Ps818) in 2016, losses of US\$228 (Ps3,928) in 2015 and losses of US\$65 (Ps962) in 2014, recognized within "Other financial income (expense), net" in profit or loss.

On March 30, 2010, CEMEX, S.A.B. de C.V. entered into a capped call transaction, subject to antidilution adjustments, over approximately 64 million CEMEX's ADSs maturing in March 2015, in connection with the 2015 Convertible Notes in order to effectively increase the conversion price of the ADSs under such notes, by means of which, at maturity of the notes, if the market price per ADS was above the strike price of approximately 11.18 dollars, CEMEX would receive in cash the difference between the market price and the strike price, with a maximum appreciation per ADS of approximately 4.30 dollars. CEMEX paid a premium of approximately US\$105. In January, 2014, CEMEX amended the terms of this capped call transaction, pursuant to which, using the then existing market valuation of the instrument, CEMEX received approximately 7.7 million zero-strike call options over the same number of ADSs. In July 2014, CEMEX amended the zero-strike call options to fix a minimum value of approximately US\$94 and retained the economic value of approximately 1 million ADSs. During December 2014, CEMEX further amended and unwound the zero-strike call options, monetizing the remainder value of the approximately 1 million ADSs it had retained, pursuant to which CEMEX received a total

### Options on the Parent Company's own shares — continued

payment of approximately US\$105. During 2014, changes in the fair value of these options generated gains of US\$17 (Ps253), which were recognized within "Other financial income (expense), net" in profit or loss.

In addition, in connection with the 2019 Mandatorily Convertible Securities (note 16B); that the securities are denominated in pesos and the functional currency of the Parent Company's division that issued the securities is the dollar (note 2D), CEMEX separated the conversion option embedded in such instruments and recognized it at fair value through profit or loss, which as of December 31, 2016 and 2015, resulted in a liability of US\$40 (Ps829) and US\$10 (Ps178), respectively. Changes in fair value generated losses of US\$29 (Ps545) in 2016, gains of US\$18 (Ps310) in 2015 and gains of US\$11 (Ps159) in 2014.

#### IV. Foreign exchange forward contracts

As of December 31, 2016, CEMEX held foreign exchange forward contracts maturing in February 2017, negotiated to hedge the U.S. dollar value of future proceeds in other currencies from expected sale of assets. As of December 31, 2015, CEMEX held foreign exchange forward contracts maturing in April 2016, negotiated to hedge the U.S. dollar value of future proceeds in euros from the sale of CEMEX's operations in Austria and Hungary (note 4A). For the years 2016 and 2015, changes in the estimated fair value of these instruments, including the effects resulting from positions entered and settled during the year, generated gains of US\$10 (Ps186) in 2016 and gains of US\$26 (Ps448) in 2015, recognized within "Other financial income (expense), net" in profit or loss.

#### V. Fuel price hedging

As of December 31, 2016 and 2015, CEMEX maintained forward contracts negotiated to hedge the price of diesel fuel in several countries in 2016 and in the United Kingdom in 2015 for aggregate notional amounts as of December 31, 2016 and 2015 of US\$44 (Ps912) and US\$16 (Ps276), respectively, with an estimated fair value representing an asset of US\$7 (Ps145) in 2016 and a liability of US\$3 (Ps52) in 2015. By means of these contracts, for own consumption only, CEMEX fixed the fuel component of the market price of diesel over certain volume representing a portion of the estimated diesel consumption in such operations. These contracts have been designated as cash flow hedges of diesel fuel consumption, and as such, changes in fair value are recognized temporarily through other comprehensive income (loss) and are recycled to operating expenses as the related diesel volumes are consumed. For the years 2016 and 2015, changes in fair value of these contracts recognized in other comprehensive income (loss) represented gains of US\$7 (Ps145) and losses of US\$3 (Ps52), respectively.

In addition, as of December 31, 2016, CEMEX held forward contracts negotiated in 2016 to hedge the price of coal, as solid fuel, for an aggregate notional amount as of December 31, 2016 of US\$33 (Ps684) and an estimated fair value representing an asset of US\$8 (Ps166). By means of these contracts, for own consumption only, CEMEX fixed the price of coal over certain volume representing a portion of the estimated coal consumption in CEMEX's applicable operations. These contracts have been designated as cash flow hedges of coal consumption, and as such, changes in fair value are recognized temporarily through other comprehensive income (loss) and are recycled to operating expenses as the related coal volumes are consumed. For the year 2016, changes in fair value of these contracts recognized in other comprehensive income (loss) represented gains of US\$8 (Ps166).

### **16E)RISK MANAGEMENT**

In recent years, CEMEX has significantly decreased its use of derivatives instruments related to debt, both currency and interest rate derivatives, thereby reducing the risk of cash margin calls. In addition, the Credit Agreement may restrict CEMEX's ability to enter into certain derivative transactions.

#### Credit risk

Credit risk is the risk of financial loss faced by CEMEX if a customer or counterpart of a financial instrument does not meet its contractual obligations and originates mainly from trade accounts receivable. As of December 31, 2016 and 2015, the maximum exposure to credit risk is represented by the balance of financial assets. Management has developed policies for the authorization of credit to customers. The exposure to credit risk is monitored constantly according to the behavior of payment of the debtors. Credit is assigned on a customer-by-customer basis and is subject to assessments which consider the customers' payment capacity, as well as past behavior regarding due dates, balances past due and delinquent accounts. In cases deemed necessary, CEMEX's management requires guarantees from its customers and financial counterparties with regard to financial assets.

The Company's management has established a policy of low risk which analyzes the creditworthiness of each new client individually before offering the general conditions of payment terms and delivery, the review includes external ratings, when references are available, and in some cases bank references. Threshold of purchase limits are established for each client, which represent the maximum purchase amounts that require different levels of approval. Customers that do not meet the levels of solvency requirements imposed by CEMEX can only carry out transactions by paying cash in advance. As of December 31, 2016, considering CEMEX's best estimate of potential losses based on an analysis of age and considering recovery efforts, the allowance for doubtful accounts was Ps2,139.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates, which only affects CEMEX's results if the fixed-rate long-term debt is measured at fair value. All of CEMEX's fixed-rate long-term debt is carried at amortized cost and therefore is not subject to interest rate risk. CEMEX's exposure to the risk of changes in market interest rates relates primarily to its long-term debt obligations with floating interest rates. As of December 31, 2016 and 2015, CEMEX was subject to the volatility of floating interest rates, which, if such rates were to increase, may adversely affect its financing cost and the results for the period. CEMEX manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to reduce its interest costs.

As of December 31, 2016 and 2015, approximately 28% and 27%, respectively, of CEMEX's long-term debt was denominated in floating rates at a weighted average interest rate of LIBOR plus 306 basis points in 2016 and 367 basis points in 2015. As of December 31, 2016 and 2015, if interest rates at that date had been 0.5% higher, with all other variables held constant, CEMEX's net income for 2016 and 2015 would have reduced by approximately US\$18 (Ps373) and US\$18 (Ps312), respectively, as a result of higher interest expense on variable rate denominated debt. This analysis does not include the interest rate swaps held by CEMEX during 2016 and 2015.

### Foreign currency risk

Foreign currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. CEMEX's exposure to the risk of changes in foreign exchange rates relates primarily to its operating activities. Due to its geographic diversification, CEMEX's revenues and costs are generated and settled in various countries and in different currencies. For the year ended December 31, 2016, approximately 20% of CEMEX's net sales, before eliminations resulting from consolidation, were generated in Mexico, 26% in the United States, 8% in the United Kingdom, 4% in Germany, 5% in France, 4% in the Europe region, 2% in Spain, 5% in Colombia, 7% in the Rest of South, Central America and the Caribbean region, 3% in Egypt, 9% in Asia, Middle East and Africa and 7% in CEMEX's other operations.

#### Foreign currency risk — continued

Foreign exchange gains and losses occur by monetary assets or liabilities in a currency different from its functional currency, and are recorded in the consolidated statements of operations, except for exchange fluctuations associated with foreign currency indebtedness directly related to the acquisition of foreign entities and related parties' long-term balances denominated in foreign currency, for which are reported in the statement of other comprehensive income (loss). As of December 31, 2016 and 2015, excluding from the sensitivity analysis the impact of translating the net assets of foreign operations into CEMEX's reporting currency, considering a hypothetic 10% strengthening of the U.S. dollar against the Mexican peso, with all other variables held constant, CEMEX's net income for 2016 and 2015 would have increased by approximately US\$136 (Ps2,829) and US\$232 (Ps3,998), respectively, as a result of higher foreign exchange losses on CEMEX's dollar-denominated net monetary liabilities held in consolidated entities with other functional currencies. Conversely, a hypothetic 10% weakening of the U.S. dollar against the Mexican peso would have the opposite effect.

As of December 31, 2016, approximately 76% of CEMEX's financial debt was Dollar-denominated, approximately 23% was Euro-denominated, less than 1% was Peso-denominated and immaterial amounts were denominated in other currencies; therefore, CEMEX had a foreign currency exposure arising from the Dollar-denominated financial debt, and the Euro-denominated financial debt, versus the currencies in which CEMEX's revenues are settled in most countries in which it operates. CEMEX cannot guarantee that it will generate sufficient revenues in Dollars and Euros from its operations to service these obligations. As of December 31, 2016 and 2015, CEMEX had not implemented any derivative financing hedging strategy to address this foreign currency risk.

As of December 31, 2016 and 2015, CEMEX's consolidated net monetary assets (liabilities) by currency are as follows:

					2016			
	M	exico	United States	Europe	South, Central America and the Caribbean	Asia, Middle East and Africa	Others 1	Total
Monetary assets	Ps 1	0,261	26,685	12,724	6,132	13,101	11,836	80,739
Monetary liabilities	1	0,564	33,145	42,336	9,130	11,305	277,117	383,597
Net monetary assets (liabilities) <sup>2</sup>	Ps	(303)	(6,460)	(29,612)	(2,998)	1,796	(265,281)	(302,858)
Out of which:								
Dollars	Ps	(483)	(6,463)	38	35	364	(214,751)	(221,260)
Pesos		180	3	_	_	_	(3,395)	(3,212)
Euros		—	_	(9,465)	_	_	(48,470)	(57,935)
Other currencies				(20,185)	(3,033)	1,432	1,335	(20,451)
	Ps	(303)	(6,460)	<u>(29,612)</u>	<u>(2,998)</u>	1,796	<u>(265,281)</u>	<u>(302,858)</u>

### CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

# As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Foreign currency risk — continued

					2015			
	Me	exico	United States	Europe	South, Central America and the Caribbean	Asia, Middle East and Africa	Others 1	Total
Monetary assets	Ps 1	3,418	10,266	15,052	5,646	9,968	7,748	62,098
Monetary liabilities	1	2,690	22,593	36,349	6,697	11,615	268,059	358,003
Net monetary assets (liabilities) <sup>2</sup>	Ps	728	<u>(12,327)</u>	(21,297)	<u>(1,051)</u>	(1,647)	(260,311)	(295,905)
Out of which:								
Dollars	Ps	(69)	(12,334)	191	604	55	(187,553)	(199,106)
Pesos		797	9	_	_	_	(29,407)	(28,601)
Euros			_	(8,837)	_	(827)	(45,183)	(54,847)
Other currencies			(2)	(12,651)	(1,655)	(875)	1,832	(13,351)
	Ps	728	<u>(12,327)</u>	<u>(21,297)</u>	<u>(1,051)</u>	(1,647)	(260,311)	<u>(295,905)</u>

- 1 Includes the Parent Company, CEMEX's financing subsidiaries, as well as Neoris N.V., among other entities.
- 2 Includes assets held for sale and liabilities directly related with these assets considering that such items will be realized in the short-term.

### **Equity risk**

Equity risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in the market price of CEMEX's and/or third party's shares. As described in note 16D, CEMEX has entered into equity forward contracts on Axtel CPOs, as well as capped call options based on the price of CEMEX's own ADSs. Under these equity derivative instruments, there is a direct relationship in the change in the fair value of the derivative with the change in price of the underlying share. All changes in fair value of such derivative instruments are recognized in profit or loss as part of "Other financial income (expense), net". A significant decrease in the market price of CEMEX's ADSs would negatively affect CEMEX's liquidity and financial position.

As of December 31, 2015, the potential change in the fair value of CEMEX's forward contracts in Axtel's shares that would result from a hypothetical, instantaneous decrease of 10% in the market price of Axtel's CPO, with all other variables held constant, CEMEX's net income for 2015 would have reduced in approximately US\$3 (Ps51); as a result of additional negative changes in fair value associated with such forward contracts. A 10% hypothetical increase in the Axtel CPO price would have generated approximately the opposite effects.

As of December 31, 2016 and 2015, the potential change in the fair value of CEMEX's options (capped calls) that would result from a hypothetical, instantaneous decrease of 10% in the market price of CEMEX's ADSs, with all other variables held constant, CEMEX's net income for 2016 and 2015 would have reduced in approximately US\$23 (Ps476) and US\$8 (Ps137), respectively, as a result of additional negative changes in fair value associated with these contracts. A 10% hypothetical increase in CEMEX's ADS price would generate approximately the opposite effect.

#### Equity risk — continued

In addition, even though the changes in fair value of CEMEX's embedded conversion option in the Mandatorily Convertible Notes 2019 denominated in a currency other than the functional issuer's currency affect profit or loss, they do not imply any risk or variability in cash flows, considering that through their exercise, CEMEX will settle a fixed amount of debt with a fixed amount of shares. As of December 31, 2016 and 2015, the potential change in the fair value of the embedded conversion options in the Mandatorily Convertible Notes 2019 that would result from a hypothetical, instantaneous decrease of 10% in the market price of CEMEX's CPOs, with all other variables held constant, would have increased CEMEX's net income for 2016 and 2015 by approximately US\$7 (Ps154) and US\$3 (Ps47), respectively; as a result of additional positive changes in fair value associated with this option. A 10% hypothetical increase in the CEMEX CPO price would generate approximately the opposite effect.

### Liquidity risk

Liquidity risk is the risk that CEMEX will not have sufficient funds available to meet its obligations. In addition to cash flows provided by its operating activities, in order to meet CEMEX's overall liquidity needs for operations, servicing debt and funding capital expenditures and acquisitions, CEMEX relies on cost-cutting and operating improvements to optimize capacity utilization and maximize profitability, as well as borrowing under credit facilities, proceeds of debt and equity offerings, and proceeds from asset sales. CEMEX is exposed to risks from changes in foreign currency exchange rates, prices and currency controls, interest rates, inflation, governmental spending, social instability and other political, economic and/or social developments in the countries in which it operates, any one of which may materially affect CEMEX's results and reduce cash from operations. The maturities of CEMEX's contractual obligations are included in note 23E. As of December 31, 2016, CEMEX has approximately US\$1,413 (Ps29,277) available in its committed revolving credit tranche under its Credit Agreement (note 16A).

As of December 31, 2016 and 2015, the potential requirement for additional margin calls under our different commitments is not significant.

#### 17) OTHER CURRENT AND NON-CURRENT LIABILITIES

As of December 31, 2016 and 2015, consolidated other current liabilities were as follows:

		2010	2015
Provisions <sup>1</sup>	Ps	11,670	10,438
Interest payable		3,425	3,421
Advances from customers		3,408	2,606
Other accounts payable and accrued expenses		3,949	4,304
	Ps	22,452	20,769

2016

2015

1 Current provisions primarily consist of accrued employee benefits, insurance payments, and accruals for legal assessments, among others. These amounts are revolving in nature and are expected to be settled and replaced by similar amounts within the next 12 months.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Other current and non-current liabilities — continued

As of December 31, 2016 and 2015, consolidated other non-current liabilities were as follows:

		2016	2015
Asset retirement obligations <sup>1</sup>	Ps	8,143	7,036
Accruals for legal assessments and other responsibilities <sup>2</sup>		1,514	1,984
Non-current liabilities for valuation of derivative instruments		818	231
Environmental liabilities <sup>3</sup>		1,172	827
Other non-current liabilities and provisions 4		5,293	4,796
	Ps	16,940	14,874

- 1 Provisions for asset retirement include future estimated costs for demolition, cleaning and reforestation of production sites at the end of their operation, which are initially recognized against the related assets and are depreciated over their estimated useful life.
- 2 Provisions for legal claims and other responsibilities include items related to tax contingencies.
- 3 Environmental liabilities include future estimated costs arising from legal or constructive obligations, related to cleaning, reforestation and other remedial actions to remediate damage caused to the environment. The expected average period to settle these obligations is greater than 15 years.
- 4 As of December 31, 2016 and 2015, includes approximately Ps2,300 and Ps3,131, respectively, of the non-current portion of taxes payable recognized since 2009 as a result of the changes to the tax consolidation regime in Mexico approved in 2009 and 2013 as described in note 19D. Approximately Ps936 and Ps840 as of December 31, 2016 and 2015 respectively, were included within current taxes payable.

Changes in consolidated other current and non-current liabilities for the years ended December 31, 2016 and 2015, were as follows:

	2016								
	Asset retirement obligations	Environmental liabilities	legal	Valuation of derivative instruments	Other liabilities and provisions	Total	2015		
Balance at beginning of									
period Ps	7,036	827	1,984	231	15,234	25,312	41,832		
Business combinations	_	_	_	_		_	629		
Additions or increase in									
estimates	1,437	307	_	925	65,003	67,672	46,408		
Releases or decrease in									
estimates	(610)	(54)	(292)	(451)	(59,896)	(61,303)	(67,604)		
Reclassifications	544	(39)	11	_	(1,257)	(741)	(3,754)		
Accretion expense	(9)	_	(14)	_	(1,010)	(1,033)	(904)		
Foreign currency									
translation	(255)	131	(175)	118	(1,116)	(1,297)	8,705		
Balance at end of period Ps	8,143	1,172	1,514	<u>823</u>	16,958	28,610	25,312		
Out of which:									
Current provisions Ps				5	11,665	11,670	10,438		

### 18) PENSIONS AND POST-EMPLOYMENT BENEFITS

### **Defined contribution pension plans**

The costs of defined contribution plans for the years ended December 31, 2016, 2015 and 2014 were approximately Ps865, Ps706 and Ps497, respectively. CEMEX contributes periodically the amounts offered by the pension plan to the employee's individual accounts, not retaining any remaining liability as of the financial statements' date.

### Defined benefit pension plans

Most CEMEX's defined benefit plans have been closed to new participants for several years. Actuarial results related to pension and other post retirement benefits are recognized in the results and/or in "Other comprehensive income (loss) for the period" in which they are generated, as correspond. For the years ended December 31, 2016, 2015 and 2014, the effects of pension plans and other post-employment benefits are summarized as follows:

	Pensions		Other benefits			Total			
Net period cost (revenue):	2016	2015	2014	2016	2015	2014	2016	2015	2014
Recorded in operating costs and expenses									
Service cost Ps	151	128	108	25	30	32	176	158	140
Past service cost	8	12	4	_	(20)	_	8	(8)	4
Loss for settlements and									
curtailments				_	(13)	<u>(110)</u>		(13)	(110)
	159	140	112	25	(3)	(78)	184	137	34
Recorded in other financial expenses									
Net interest cost	711	596	527	57	56	54	768	652	581
Recorded in other comprehensive income (loss) for the period Actuarial (gains) losses for the									
period	3,985	872	3,014	34	(124)	(13)	4,019	748	3,001
Ps	4,855	1,608	3,653	116	(71)	(37)	4,971	1,537	3,616

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Defined benefit pension plans — continued

The reconciliations of the actuarial benefits obligations, pension plan assets, and liabilities recognized in the balance sheet as of December 31, 2016 and 2015 are presented as follows:

	Pens	sions	Other b	enefits	To	tal
	2016	2015	2016	2015	2016	2015
Change in benefits obligation:						
Projected benefit obligation at beginning of year Ps	42,740	40,285	1,100	1,321	43,840	41,606
Service cost	151	128	25	30	176	158
Interest cost	1,685	1,561	59	58	1,744	1,619
Actuarial (gains) losses for the period	6,263	(693)	35	(129)	6,298	(822)
Reduction for disposal of assets (notes 4A and 4B)	_	(196)		(161)	—	(357)
Settlements and curtailments	_	_	(19)	(13)	(19)	(13)
Plan amendments	8	12	_	(20)	8	(8)
Benefits paid	(2,379)	(2,186)	(74)	(60)	(2,453)	(2,246)
Foreign currency translation	2,587	3,829	38	74	2,625	3,903
Projected benefit obligation at end of year	51,055	42,740	1,164	1,100	52,219	43,840
Change in plan assets:						
Fair value of plan assets at beginning of year	25,547	24,698	24	27	25,571	24,725
Return on plan assets	974	965	2	2	976	967
Actuarial results	2,278	(1,565)	1	(5)	2,279	(1,570)
Employer contributions	1,289	1,031	93	60	1,382	1,091
Reduction for disposal of assets (notes 4A and 4B)	_	(79)	_		_	(79)
Settlements and curtailments	_	_	(19)		(19)	_
Benefits paid	(2,379)	(2,186)	(74)	(60)	(2,453)	(2,246)
Foreign currency translation	1,119	2,683	(1)		1,118	2,683
Fair value of plan assets at end of year	28,828	25,547	26	24	28,854	25,571
Amounts recognized in the balance sheets:						
Net projected liability recognized in the balance sheet Ps	22,227	<u>17,193</u>	<u>1,138</u>	<u>1,076</u>	23,365	18,269

For the years 2016, 2015 and 2014, actuarial (gains) losses for the period were generated by the following main factors as follows:

		2016	2015	2014
Actuarial (gains) losses due to experience	Ps	(511)	(105)	238
Actuarial (gains) losses due to demographic assumptions		(231)	(153)	330
Actuarial (gains) losses due financial assumptions		4,761	1,006	2,433
	Ps	4,019	748	3,001
				=

Net actuarial losses due to financial assumptions during 2016 were mainly generated by a significant reduction in the discount rates applicable to the benefit obligations in the United Kingdom, Germany and other European countries, considering macroeconomic and political uncertainty, partially offset by an increase in the discount rate in Mexico. These actuarial losses originated by the reduction in the discount rates in 2016 were also partially

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Defined benefit pension plans — continued

offset by actual returns higher than estimated in some of the plan assets related to CEMEX's defined benefit plans. During 2015, discounts rates increased slightly or remained flat as compared to 2014, but the resulting actuarial gains were offset and reversed by actuarial losses generated by actual returns lower than estimated in certain of CEMEX's plan assets. In 2014 there was also a reduction in the discount rates applicable to the obligations at the end of the period in the United Kingdom, Germany and the United States.

As of December 31, 2016 and 2015, plan assets were measured at their estimated fair value and, based on the hierarchy of fair values, are detailed as follows:

	2016					2015			
	Level 1	Level 2	Level 3	Total		Level 1	Level 2	Level 3	Total
Cash Ps	1,075	1,024		2,099	Ps	649	884		1,533
Investments in corporate bonds	1,050	2,617	_	3,667		896	2,615	_	3,511
Investments in government bonds	209	10,081	_	10,290		153	9,122	_	9,275
Total fixed-income securities	2,334	13,722	_	16,056		1,698	12,621	_	14,319
Investment in marketable securities	2,001	5,956	_	7,957		1,503	5,441	_	6,944
Other investments and private funds	_770	3,478	593	4,841		618	3,244	446	4,308
Total variable-income securities	2,771	9,434	593	12,798		2,121	8,685	446	11,252
Total plan assets Ps	<u>5,105</u>	23,156	<u>593</u>	28,854	Ps	3,819	<u>21,306</u>	446	<u>25,571</u>

As of December 31, 2016, estimated payments for pensions and other post-employment benefits over the next 10 years were as follows:

		2016
2017	Ps	2,934
2018		2,850
2019		2,892
2020		2,771
2021		,
2022 – 2026		15,047

The most significant assumptions used in the determination of the benefit obligation were as follows:

			2016		2015						
	Mexico			Range of rates in other countries							
Discount rates	9.0%	4.2%	2.6%	1.1% - 7.0%	8.0%	4.4%	3.7%	1.6% - 7.3%			
Rate of return on plan assets	9.0%	4.2%	2.6%	1.1% - 7.0%	8.0%	4.4%	3.7%	1.6% - 7.3%			
Rate of salary increases	4.0%		3.3%	1.5% - 6.0%	4.0%		3.1%	2.0% - 6.0%			

### CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014

(Millions of Mexican pesos)

#### Defined benefit pension plans — continued

As of December 31, 2016 and 2015, the aggregate projected benefit obligation ("PBO") for pension plans and other post-employment benefits and the plan assets by country were as follows:

			2016			2015			
		PBO	Assets	Deficit		PBO	Assets	Deficit	
Mexico	Ps	3,247	824	2,423	Ps	3,699	538	3,161	
United States		7,110	4,192	2,918		5,988	3,552	2,436	
United Kingdom		33,925	22,154	11,771		27,522	20,042	7,480	
Germany		4,429	227	4,202		3,700	205	3,495	
Other countries		3,508	1,457	2,051		2,931	1,234	1,697	
	Ps	52,219	28,854	23,365	Ps	43,840	25,571	18,269	

Applicable regulation in the United Kingdom requires entities to maintain plan assets at a level similar to that of the obligations. In November 2012, in order to better manage CEMEX's obligations under its defined benefit pension schemes and future cash funding requirements thereof, CEMEX implemented an asset backed pension funding arrangement in its operations in the United Kingdom by means of which CEMEX transferred certain operating assets to a non-transferable limited partnership, owned, controlled and consolidated by CEMEX UK with a total value of approximately US\$553 and entered into lease agreements for the use of such assets with the limited partnership, in which the pension schemes hold a limited interest. On an ongoing basis CEMEX UK will make annual rental payments of approximately US\$20, increasing at annual rate of 5%, which will generate profits in the limited partnership that are then distributed to the pension schemes. As previously mentioned, the purpose of the structure, in addition to provide the pension schemes with secured assets producing an annual return over a period of 25 years, improves the security for the trustees of the pension schemes, and reduces the level of cash funding that CEMEX UK will have to make in future periods. In 2037, on expiry of the lease arrangements, the limited partnership will be terminated and under the terms of the agreement, the remaining assets will be distributed to CEMEX UK. Any future profit distribution from the limited partnership to the pension fund will be considered as an employer contribution to plan assets in the period in which they occur.

In some countries, CEMEX has established health care benefits for retired personnel limited to a certain number of years after retirement. As of December 31, 2016 and 2015, the projected benefits obligation related to these benefits was approximately Ps837 and Ps786, respectively. The medical inflation rates used to determine the projected benefits obligation of these benefits in 2016 and 2015 for Mexico were 7.0% and 7.0%, respectively, for Puerto Rico 4.3% and 4.5%, respectively, and for the United Kingdom were 6.8% and 6.6%, respectively. Eligibility for retiree medical in the United States has been terminated for all new employees on December 31, 2014, and remaining participants are under a capped group and future health care cost trend rates are not applicable. The medical inflation rate for 2014 in the United States was 4.4%.

# Significant events related to employees' pension benefits and other post-employment benefits during the reported periods

During 2015, CEMEX in the United States terminated the retiree medical coverage for certain participants not yet retired. In addition, during 2014, CEMEX in the United States terminated the retiree medical and life insurance coverage for most new retirees, and changed the existing retirees program effective January 1, 2015, where participants will cease their current plans and instead receive a Health Reimbursement Account (HRA) contribution, if they become eligible. These curtailment events resulted in an adjustment to past service cost which generated gains of approximately Ps13 (US\$1) in 2015 and Ps110 (US\$8) in 2014, recognized immediately through the benefit cost of the respective year.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Sensitivity analysis of pension and other post-employment benefits

For the year ended December 31, 2016, CEMEX performed sensitivity analyses on the most significant assumptions that affect the PBO, considering reasonable independent changes of plus or minus 50 basis points in each of these assumptions. The increase (decrease) that would have resulted in the PBO of pensions and other post-employment benefits as of December 31, 2016 are shown below:

		Pensions		Other benefits		Total	
		+50 bps	-50 bps	+50 bps	-50 bps	+50 bps	-50 bps
Assumptions:							
Discount Rate Sensitivity	Ps	(3,699)	4,033	(53)	58	(3,752)	4,091
Salary Increase Rate Sensitivity		91	(83)	6	(7)	97	(90)
Pension Increase Rate Sensitivity		2,254	(2,127)	_		2,254	(2,127)

#### 19) INCOME TAXES

#### 19A) INCOME TAXES FOR THE PERIOD

The amounts of income tax revenue (expense) in the statements of operations for 2016, 2015 and 2014 are summarized as follows:

		2016	2015	2014
Current income taxes	Ps	(3,448)	6,149	(4,184)
Deferred income taxes		352	(8,477)	264
	Ps	(3,096)	(2,328)	(3,920)

### 19B) DEFERRED INCOME TAXES

As of December 31, 2016 and 2015, the main temporary differences that generated the consolidated deferred income tax assets and liabilities are presented below:

		2016	2015
Deferred tax assets:			
Tax loss carryforwards and other tax credits	Ps	17,514	16,658
Accounts payable and accrued expenses		9,262	8,220
Intangible assets and deferred charges, net		6,358	5,487
Others		359	130
Total deferred tax assets, net		33,493	30,495
Deferred tax liabilities:			
Property, machinery and equipment		(35,095)	(32,742)
Investments and other assets		(1,958)	(2,689)
Total deferred tax liabilities, net		(37,053)	(35,431)
Net deferred tax liabilities	Ps	(3,560)	(4,936)
Out of which:			
Net deferred tax (liability) asset in Mexican entities	Ps	(2,509)	255
Net deferred tax (liability) asset in Foreign entities	Ps	(1,051)	(5,191)

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Deferred income taxes — continued

The breakdown of changes in consolidated deferred income taxes during 2016, 2015 and 2014 were as follows:

		2016	2015	2014
Deferred income tax (charged) credited to profit or loss	Ps	352	(8,477)	264
Deferred income tax (charged) credited to stockholders' equity		514	1,089	229
Reclassification to other captions in the balance sheet and in the statement of				
operations <sup>1,2</sup>		510	(5,479)	410
Change in deferred income tax during the period	Ps	1,376	(12,867)	903

- In 2016, 2015 and 2014, includes the effects of discontinued operations (note 4A) and in 2015 the effects of the termination of tax consolidation regime.
- 2 In 2014, includes the effect of the divest assets in the western region of Germany (note 15B).

Current and/or deferred income tax relative to items of other comprehensive income (loss) during 2016, 2015 and 2014 were as follows:

	2016	2015	2014
Ps	(410)	(272)	(75)
	(12)	(181)	247
	788	183	486
	(274)	906	(257)
Ps	92	636	401
	Ps Ps	Ps (410) (12) 788 (274)	Ps (410) (272) (12) (181) 788 183 (274) 906

For the recognition of deferred tax assets, CEMEX analyzes the aggregate amount of self-determined tax loss carryforwards included in its income tax returns in each country where CEMEX believes, based on available evidence, that the tax authorities would not reject such tax loss carryforwards; and the likelihood of the recoverability of such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income. If CEMEX believes that it is probable that the tax authorities would reject a self-determined deferred tax asset, it would decrease such asset. Likewise, if CEMEX believes that it would not be able to use a tax loss carryforward before its expiration or any other tax asset, CEMEX would not recognize such asset. Both situations would result in additional income tax expense for the period in which such determination is made. In order to determine whether it is probable that deferred tax assets will ultimately be realized, CEMEX takes into consideration all available positive and negative evidence, including factors such as market conditions, industry analysis, expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc. In addition, every reporting period, CEMEX analyzes its actual results versus its estimates, and adjusts, as necessary, its tax asset valuations. If actual results vary from CEMEX's estimates, the deferred tax asset may be affected and necessary adjustments will be made based on relevant information, any adjustments recorded will affect CEMEX's statements of operations in such period.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Deferred income taxes — continued

As of December 31, 2016, consolidated tax loss and tax credits carryforwards expire as follows:

			Amount of reserved carryforwards	Amount of unreserved carryforwards
2017	Ps	935	579	356
2018		1,916	1,577	339
2019		7,956	7,821	135
2020		8,922	2,375	6,547
2021 and thereafter		373,840	325,292	48,548
	Ps	393,569	337,644	55,925

As of December 31, 2016, in connection with CEMEX's deferred tax loss carryforwards presented in the table above, in order to realize the benefits associated with such deferred tax assets that have not been reserved, before their expiration, CEMEX would need to generate approximately Ps55,925 in consolidated pre-tax income in future periods. For the year ended December 31, 2014, CEMEX reported pre-tax losses on a worldwide consolidated basis. Nonetheless, based on the same forecasts of future cash flows and operating results used by CEMEX's management to allocate resources and evaluate performance in the countries in which CEMEX operates, which include expected growth in revenues and reductions in interest expense in several countries due to a reduction in intra-group debt balances, along with the implementation of feasible tax strategies, CEMEX believes that it will recover the balance of its tax loss carryforwards that have not been reserved before their expiration. In addition, CEMEX concluded that, the deferred tax liabilities that were considered in the analysis of recoverability of its deferred tax assets will reverse in the same period and tax jurisdiction of the related recognized deferred tax assets. Moreover, a certain amount of CEMEX's deferred tax assets refer to operating segments and tax jurisdictions in which CEMEX is currently generating taxable income or in which, according to CEMEX's management cash flow projections, will generate taxable income in the relevant periods before the expiration of the deferred tax assets.

CEMEX does not recognize a deferred income tax liability related to its investments in subsidiaries and interests in joint ventures, considering that CEMEX controls the reversal of the temporary differences arising from these investments and management is satisfied that such temporary differences will not reverse in the foreseeable future.

#### 19C) EFFECTIVE TAX RATE

For the years ended as of December 31, 2016, 2015 and 2014, the effective consolidated income tax rates were as follows:

		2016	2015	2014
Income (loss) before income tax	Ps	17,279	3,182	(1,850)
Income tax expense		(3,096)	(2,328)	(3,920)
Effective consolidated income tax rate <sup>1</sup>		(17.9)%	% (73.2) <sup>9</sup>	% <u>211.9</u> %

1 The average effective tax rate equals the net amount of income tax revenue or expense divided by income or loss before income taxes, as these line items are reported in profit or loss.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Effective tax rate — continued

Differences between the financial reporting and the corresponding tax basis of assets and liabilities and the different income tax rates and laws applicable to CEMEX, among other factors, give rise to permanent differences between the statutory tax rate applicable in Mexico, and the effective tax rate presented in the consolidated statements of operations, which in 2016, 2015 and 2014 were as follows:

2016		20	15	2014	
%	Ps	%	Ps	%	Ps
(30.0)	(5,184)	(30.0)	(955)	(30.0)	555
0.2	32	40.2	1,280	(3.9)	73
84.0	14,514	(93.1)	(2,963)	71.4	(1,320)
—	—	35.7	1,136	_	_
(3.6)	(622)	9.2	293	5.5	(101)
3.8	657	39.7	1,263	(47.1)	871
(11.2)	(1,935)	(29.0)	(922)	31.7	(586)
11.2	1,935	53.2	1,693	(393.5)	7,280
(71.3)	(12,320)	(109.1)	(3,473)	547.8	(10,135)
0.7	121	8.5	272	31.7	(586)
(1.7)	(294)	1.5	48	(1.7)	29
(17.9)	(3,096)	(73.2)	(2,328)	211.9	(3,920)
	(30.0) 0.2 84.0 — (3.6) 3.8 (11.2) 11.2 (71.3) 0.7 (1.7)	%         Ps           (30.0)         (5,184)           0.2         32           84.0         14,514           —         —           (3.6)         (622)           3.8         657           (11.2)         (1,935)           11.2         1,935           (71.3)         (12,320)           0.7         121           (1.7)         (294)	%         Ps         %           (30.0)         (5,184)         (30.0)           0.2         32         40.2           84.0         14,514         (93.1)           —         35.7           (3.6)         (622)         9.2           3.8         657         39.7           (11.2)         (1,935)         (29.0)           11.2         1,935         53.2           (71.3)         (12,320)         (109.1)           0.7         121         8.5           (1.7)         (294)         1.5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	%         Ps         %         Ps         %           (30.0)         (5,184)         (30.0)         (955)         (30.0)           0.2         32         40.2         1,280         (3.9)           84.0         14,514         (93.1)         (2,963)         71.4           —         —         35.7         1,136         —           (3.6)         (622)         9.2         293         5.5           3.8         657         39.7         1,263         (47.1)           (11.2)         (1,935)         (29.0)         (922)         31.7           11.2         1,935         53.2         1,693         (393.5)           (71.3)         (12,320)         (109.1)         (3,473)         547.8           0.7         121         8.5         272         31.7           (1.7)         (294)         1.5         48         (1.7)

- 1 Refers mainly to the effects of the differences between the statutory income tax rate in Mexico of 30% against the applicable income tax rates of each country where CEMEX operates.
- 2 Refers to the effects in the effective income tax rate associated with changes during the period in the amount of deferred income tax assets related to CEMEX's tax loss carryforwards.

The following table compares variations between the line item "Changes in deferred tax assets" as presented in the table above against the changes in deferred tax assets in the balance sheet for the years ended December 31, 2016 and 2015:

		20	16	20	15
	Changes balance		Amounts in reconciliation	Changes in the balance sheet	Amounts in reconciliation
Tax loss carryforwards generated and not					
recognized during the year P	Ps –	_	(9,108)	_	(3,687)
Utilization of deferred tax assets to settle					
liabilities (note 19D)	_	_	_	(11,136)	_
Derecognition related to tax loss carryforwards					
recognized in prior years	(4,8	43)	(4,843)	(2,554)	(2,554)
Recognition related to unrecognized tax loss					
carryforwards	1,6	31	1,631	2,768	2,768
Foreign currency translation and other effects	4,0	68		1,860	_
Changes in deferred tax assets P	Ps 8	56	(12,320)	(9,062)	(3,473)

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### 19D) UNCERTAIN TAX POSITIONS AND SIGNIFICANT TAX PROCEEDINGS

As of December 31, 2016 and 2015, as part of short-term and long-term provisions and other liabilities (note 17), CEMEX has recognized provisions related to unrecognized tax benefits in connection with uncertain tax positions taken, in which it is deemed probable that the tax authority would differ from the position adopted by CEMEX. As of December 31, 2016, the tax returns submitted by some subsidiaries of CEMEX located in several countries are under review by the respective tax authorities in the ordinary course of business. CEMEX cannot anticipate if such reviews will result in new tax assessments, which would, should any arise, be appropriately disclosed and/or recognized in the financial statements.

A summary of the beginning and ending amount of unrecognized tax benefits for the years ended December 31, 2016, 2015 and 2014, excluding interest and penalties, is as follows:

		2016	2015	2014
Balance of tax positions at beginning of year	Ps	1,190	1,396	1,283
Additions for tax positions of prior years		200	134	216
Additions for tax positions of current year		90	71	278
Reductions for tax positions related to prior years and other items		(131)	(95)	(71)
Settlements and reclassifications		(163)	(204)	(317)
Expiration of the statute of limitations		(126)	(231)	(73)
Foreign currency translation effects		72	119	80
Balance of tax positions at end of year	Ps	1,132	1,190	1,396

Tax examinations can involve complex issues, and the resolution of issues may span multiple years, particularly if subject to negotiation or litigation. Although CEMEX believes its estimates of the total unrecognized tax benefits are reasonable, uncertainties regarding the final determination of income tax audit settlements and any related litigation could affect the amount of total unrecognized tax benefits in future periods. It is difficult to estimate the timing and range of possible changes related to the uncertain tax positions, as finalizing audits with the income tax authorities may involve formal administrative and legal proceedings. Accordingly, it is not possible to reasonably estimate the expected changes to the total unrecognized tax benefits over the next 12 months, although any settlements or statute of limitations expirations may result in a significant increase or decrease in the total unrecognized tax benefits, including those positions related to tax examinations being currently conducted.

As of December 31, 2016, the Company's most significant tax proceedings, some of which are associated with the uncertain tax positions described above are as follows:

- As of December 31, 2016, the U.S. Internal Revenue Service ("IRS") has concluded its audit for the year 2014. The final findings did not alter the originally filed tax return, which had no reserves set aside for any potential tax issue. In addition, there is any tax matter considered material to CEMEX's financial results related to the IRS' audits of prior periods. On May 18, 2016 and April 24, 2015, the IRS commenced its audits of the 2016 and 2015 tax years, respectively, under the Compliance Assurance Process. CEMEX has not identified any material audit issues and, as such, no reserves are recorded for either the 2016 or 2015 audits in CEMEX's financial statements.
- On July 7, 2011, the tax authorities in Spain notified CEMEX España of a tax audit process in Spain
  covering the tax years from and including 2006 to 2009. The tax authorities in Spain have challenged part of
  the tax losses reported by CEMEX España for such years. The tax authorities in Spain notified CEMEX

#### Uncertain tax positions and significant tax proceedings — continued

España of fines in the aggregate amount of approximately €456 (US\$480 or Ps9,938). The laws of Spain provide a number of appeals that could be filed against such penalty without making any payment until they are finally resolved. On April 22, 2014, CEMEX España filed appeals against such fines. At this stage, CEMEX does not consider probable an adverse resolution in this proceeding. Nonetheless, is difficult to assess with certainty the likelihood of an adverse result, and the appeals that CEMEX España has file could take an extended amount of time to be resolved, but if adversely resolved, it could have a material adverse impact on CEMEX's results of operations, liquidity or financial position.

- In November 2009, amendments to the income tax law in Mexico effective on January 1, 2010 modified the tax consolidation regime by requiring entities to determine income taxes as if the tax consolidation rules did not exist from 1999 onward, specifically, turning into taxable items: a) the difference between the sum of the equity of the controlled entities for tax purposes and the equity of the consolidated entity for tax purposes; b) dividends from the controlled entities for tax purposes to the Parent Company; and c) other transactions that represented the transfer of resources between the companies included in the tax consolidation. In December 2010, the tax authority in Mexico had granted the option to defer the calculation and payment of the income tax over the difference in equity explained above, until the subsidiary was excluded or the elimination of the tax consolidation. Nonetheless, in December 2013 new amendments to the income tax law in Mexico were approved effective January 1, 2014, which eliminated the tax consolidation regime and implemented prospectively a new voluntary integration regime that CEMEX did not join. As a result, beginning in 2014, each Mexican entity determines its income taxes based solely in its individual results. A period of up to 10 years was established for the settlement of the liability for income taxes related to the tax consolidation regime accrued until December 31, 2013, amount which considering the rules issued for the disconnection of the tax consolidation regime as well as payments made during 2013 amounted to approximately Ps24,804 as of December 31, 2013. In 2014, considering payments incurred net of inflation adjustments, as of December 31, 2014, the balance payable was reduced to approximately Ps21,429. Furthermore, in October 2015, a new tax reform approved by Congress (the "new tax reform") granted entities the option to settle a portion of the liability for the exit of the tax consolidation regime using available tax loss carryforwards of the previously consolidated entities, considering a discount factor, and a tax credit to offset certain items of the aforementioned liability. Consequently, during 2015, as a result of payments made, the liability was further reduced to approximately Ps16,244, which after the application of tax credits and assets for tax loss carryforwards (as provided by the new tax reform) which had a book value for CEMEX before discount of approximately Ps11,136, as of December 31, 2015, the Parent Company's liability was reduced to approximately Ps3,971. In 2016, considering payments made during the year net of inflation adjustments, as of December 31, 2016, CEMEX reduced the balance payable to approximately Ps3,236.
- On April 1, 2011, the Colombian Tax Authority notified CEMEX Colombia of a special proceeding rejecting certain deductions taken by CEMEX Colombia in its 2009 tax return. The Colombian Tax Authority assessed an increase in taxes to be paid by CEMEX Colombia in an amount in Colombian pesos equivalent to approximately US\$30 (Ps622) and imposed a penalty in an amount in Colombian pesos equivalent to approximately US\$48 (Ps995), both as of December 31, 2016. The Colombian Tax Authority argues that certain expenses are not deductible for fiscal purposes because they are not linked to direct revenues recorded in the same fiscal year, without considering that future revenue will be taxed under the income tax law in Colombia. CEMEX Colombia responded to the special proceeding on June 25, 2011. On December 15, 2011, the Colombian Tax Authority issued its final resolution, which confirmed the information in the special proceeding. CEMEX Colombia appealed such resolution on February 15, 2012.

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Uncertain tax positions and significant tax proceedings — continued

On January 17, 2013, the Colombian Tax Authority confirmed CEMEX Colombia its final resolution. On May 10, 2013, CEMEX Colombia appealed the final resolution before the Administrative Tribunal of Cundinamarca, which was admitted on June 21, 2013. On July 14, 2014, CEMEX Colombia was notified about an adverse resolution to its appeal, which confirms the official liquidation notified by the Colombian Tax Authority. On July 22, 2014, CEMEX Colombia filed an appeal against this resolution before the Colombian State Council (*Consejo de Estado*). On September 17, 2015, CEMEX Colombia presented arguments in second instance on this proceeding. At this stage of the proceeding, as of December 31, 2016, CEMEX does not consider probable an adverse resolution in this proceeding. Nonetheless, is difficult to assess with certainty the likelihood of an adverse result; but if adversely resolved, this proceeding could have a material adverse impact on CEMEX's results of operations, liquidity or financial position.

#### 20) STOCKHOLDERS' EQUITY

As of December 31, 2016 and 2015, stockholders' equity excludes investments in CPOs of the Parent Company held by subsidiaries of approximately Ps327 (19,751,229 CPOs) and Ps179 (18,991,576 CPOs), respectively, which were eliminated within "Other equity reserves".

#### 20A) COMMON STOCK AND ADDITIONAL PAID-IN CAPITAL

As of December 31, 2016 and 2015, the breakdown of common stock and additional paid-in capital was as follows:

		2016	2015
Common stock	Ps	4,162	4,158
Additional paid-in capital		123,174	115,466
	Ps	127,336	119,624

As of December 31, 2016 and 2015 the common stock of CEMEX, S.A.B. de C.V. was presented as follows:

	20	16	20	15
Shares 1	Series A <sup>2</sup>	Series B <sup>2</sup>	Series A <sup>2</sup>	Series B <sup>2</sup>
Subscribed and paid shares Unissued shares authorized for stock	28,121,583,148	14,060,791,574	26,935,196,072	13,467,598,036
compensation programs	638,468,154	319,234,077	747,447,386	373,723,693
convertible securities <sup>3</sup>	5,218,899,920	2,609,449,960	5,020,899,920	2,510,449,960
	33,978,951,222	16,989,475,611	<u>32,703,543,378</u>	16,351,771,689

- As of December 31, 2016 and 2015, 13,068,000,000 shares correspond to the fixed portion, and 37,900,426,833 shares in 2016 and 35,987,315,067 shares in 2015, correspond to the variable portion.
- 2 Series "A" or Mexican shares must represent at least 64% of CEMEX's capital stock; meanwhile, Series "B" or free subscription shares must represent at most 36% of CEMEX's capital stock.
- 3 Shares that guarantee the conversion of both the outstanding voluntary and mandatorily convertible securities and new securities issues (note 16B).

Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Common stock and additional paid-in capital — continued

On March 31, 2016, stockholders at the annual ordinary shareholders' meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings by issuing up to 1,616 million shares (539 million CPOs), which shares were issued, representing an increase in common stock of approximately Ps4, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps6,966; (ii) increase the variable common stock by issuing up to 297 million shares (99 million CPOs), which will be kept in the Parent Company's treasury to be used to preserve the anti-dilutive rights of note holders pursuant CEMEX's convertible securities (note 16B).

On March 26, 2015, stockholders at the annual ordinary shareholders' meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings by issuing up to 1,500 million shares (500 million CPOs), which shares were issued, representing an increase in common stock of approximately Ps4, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps7,613; (ii) increase the variable common stock by issuing up to 297 million shares (99 million CPOs), which will be kept in the Parent Company's treasury to be used to preserve the anti-dilutive rights of note holders pursuant CEMEX's convertible securities (note 16B).

On March 20, 2014, stockholders at the annual ordinary shareholders' meeting approved resolutions to: (i) increase the variable common stock through the capitalization of retained earnings by issuing up to 1,404 million shares (468 million CPOs), which shares were issued, representing an increase in common stock of approximately Ps4, considering a nominal value of Ps0.00833 per CPO, and additional paid-in capital of approximately Ps7,614; (ii) increase the variable common stock by issuing up to 387 million shares (129 million CPOs), which will be kept in the Parent Company's treasury to be used to preserve the anti-dilutive rights of note holders pursuant CEMEX's convertible securities (note 16B).

In connection with the long-term executive share-based compensation program (note 21) in 2016, 2015 and 2014, CEMEX issued approximately 53.9 million CPOs, 49.2 million and 61.1 million, respectively, generating an additional paid-in capital of approximately Ps742 in 2016, Ps655 in 2015 and Ps765 in 2014 associated with the fair value of the compensation received by executives.

#### 20B) OTHER EQUITY RESERVES

As of December 31, 2016 and 2015 other equity reserves are summarized as follows:

		2016	2015
Cumulative translation effect, net of effects from perpetual debentures and deferred			
income taxes recognized directly in equity (notes 19B and 20D)	Ps	31,293	17,606
Cumulative actuarial losses		(10,934)	(6,915)
Effects associated with CEMEX's convertible securities <sup>1</sup>		4,761	4,761
Treasury shares held by subsidiaries		(327)	(179)
	Ps	24,793	15,273

Represents the equity component upon the issuance of CEMEX's convertible securities described in note 16B, as well as the effects associated with such securities in connection with the change in the Parent Company's functional currency (note 2D). Upon conversion of these securities, the balances have been correspondingly reclassified to common stock and/or additional paid-in capital (note 16A).

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### Other equity reserves — continued

For the years ended December 31, 2016, 2015 and 2014, the translation effects of foreign subsidiaries included in the statements of comprehensive income (loss) were as follows:

		2016	2015	2014
Foreign currency translation adjustment <sup>1</sup>	Ps	20,647	12,860	15,157
Foreign exchange fluctuations from debt <sup>2</sup>		1,367	908	479
Foreign exchange fluctuations from intercompany balances <sup>3</sup>		(10,385)	(5,801)	(15,135)
	Ps	11,629	7,967	501

- 1 These effects refer to the result from the translation of the financial statements of foreign subsidiaries.
- 2 Generated by foreign exchange fluctuations over a notional amount of debt in CEMEX, S.A.B. de C.V., associated with the acquisition of foreign subsidiaries and designated as a hedge of the net investment in foreign subsidiaries (note 2D).
- 3 Refers to foreign exchange fluctuations arising from balances with related parties in foreign currencies that are of a long-term investment nature considering that their liquidation is not anticipated in the foreseeable future and foreign exchange fluctuations over a notional amount of debt of a subsidiary of CEMEX España identified and designated as a hedge of the net investment in foreign subsidiaries.

#### **20C) RETAINED EARNINGS**

The Parent Company's net income for the year is subject to a 5% allocation toward a legal reserve until such reserve equals one fifth of the common stock. As of December 31, 2016, the legal reserve amounted to Ps1,804.

#### 20D) NON-CONTROLLING INTEREST AND PERPETUAL DEBENTURES

#### **Non-controlling interest**

Non-controlling interest represents the share of non-controlling stockholders in the results and equity of consolidated subsidiaries. As of December 31, 2016 and 2015, non-controlling interest in equity amounted to approximately Ps19,876 and Ps12,708, respectively.

On July 18, 2016, CEMEX Holdings Philippines, Inc. ("CHP"), an indirect wholly-owned subsidiary of CEMEX España, S.A., closed its initial offering of 2,337,927,954 new common shares, at a price of 10.75 Philippine Pesos per common share, in a public offering to investors in the Philippines and in a concurrent private placement to eligible investors outside of the Philippines. The number of common shares issued by CHP includes 304,947,124 shares which subscription option was exercised by the underwriters any time from June 30, 2016, the date of pricing, up to and including the day prior to the first day of trading of the shares on July 18, 2016. CHP's assets consist primarily of CEMEX's cement manufacturing assets in the Philippines. After giving effect to the offering, and the exercise of the subscription option, CEMEX Asian South East Corporation ("CASE"), an indirect wholly-owned subsidiary of CEMEX España, S.A., owns approximately 55.0% of CHP's outstanding common shares. CHP's common shares are listed on the Philippine Stock Exchange under the ticker CHP. The net proceeds from the offering of approximately US\$507 (considering an exchange rate of 46.932 Philippines Pesos per U.S. dollar on June 30, 2016), after deducting commissions and other offering expenses, were used by CEMEX for general corporate purposes, including the repayment of existing debt.

# CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### **Perpetual debentures**

As of December 31, 2016 and 2015, the balances of the non-controlling interest included approximately US\$438 (Ps9,075) and US\$440 (Ps7,581), respectively, representing the notional amount of perpetual debentures, which exclude any perpetual debentures held by subsidiaries.

Interest expense on the perpetual debentures, was included within "Other equity reserves" and amounted to approximately Ps507 in 2016, Ps432 in 2015 and Ps420 in 2014, excluding in all the periods the amount of interest accrued by perpetual debentures held by subsidiaries.

CEMEX's perpetual debentures have no fixed maturity date and there are no contractual obligations for CEMEX to exchange any series of its outstanding perpetual debentures for financial assets or financial liabilities. As a result, these debentures, issued entirely by Special Purpose Vehicles ("SPVs"), qualify as equity instruments and are classified within non-controlling interest, as they were issued by consolidated entities. In addition, subject to certain conditions, CEMEX has the unilateral right to defer indefinitely the payment of interest due on the debentures. The classification of the debentures as equity instruments was made under applicable IFRS. The different SPVs were established solely for purposes of issuing the perpetual debentures and were included in CEMEX's consolidated financial statements.

As of December 31, 2016 and 2015, the detail of CEMEX's perpetual debentures, excluding the perpetual debentures held by subsidiaries, was as follows:

		2016		2015		2015		2015		2015		Repurchase	
Issuer	Issuance date	Nominal	amount	Nominal amount		option	Interest rate						
C10-EUR Capital (SPV)													
Ltd	May 2007	€	64	€	64	Tenth anniversary	6.277%						
C8 Capital (SPV) Ltd	February 2007	US\$	135	US\$	3135	Eighth anniversary	LIBOR + 4.40%						
C5 Capital (SPV) Ltd <sup>1</sup>	December 2006	US\$	61	US\$	61	Fifth anniversary	LIBOR + 4.277%						
C10 Capital (SPV) Ltd	December 2006	US\$	175	US\$	3175	Tenth anniversary	LIBOR + 4.71%						

1 Under the Credit Agreement, and previously under the Facilities Agreement, CEMEX is not permitted to call these debentures.

#### 21) EXECUTIVE SHARE-BASED COMPENSATION

CEMEX has long-term restricted share-based compensation programs providing for the grant of CEMEX's CPOs to a group of executives, pursuant to which, new CPOs are issued under each annual program over a service period of four years. The CPOs of the annual grant (25% of each annual program) are placed at the beginning of the service period in the executives' accounts to comply with a one year restriction on sale. Under these programs, the Parent Company issued new shares for approximately 53.9 million CPOs in 2016, 49.2 million CPOs in 2015 and 61.1 million CPOs in 2014 that were subscribed and pending for payment in CEMEX's treasury. As of December 31, 2016, there are approximately 75.7 million CPOs associated with these annual programs that are expected to be issued in the following years as the executives render services.

Beginning January 1, 2013, eligible executives belonging to the operations of CLH and subsidiaries, ceased to receive CEMEX's CPOs and instead started receiving shares of CEMEX Latam, sharing significantly the same conditions of CEMEX's plan also over a service period of four years. During 2016 and 2015, CEMEX Latam

### Executive share-based compensation — continued

physically delivered 271,461 shares and 242,618 shares, respectively, corresponding to the vested portion of prior years' grants, which were subscribed and held in CEMEX Latam's treasury. As of December 31, 2016, there are approximately 540,359 shares of CEMEX Latam associated with these annual programs that are expected to be delivered in the following years as the executives render services.

In addition, in 2012, CEMEX initiated a share-based compensation program for a group of executives which was linked to both, internal performance conditions (increase in Operating EBITDA) and market conditions (increase in the price of CEMEX's CPO), over a period of three years ending on December 31, 2014. Under this program, CEMEX granted awards over approximately 39.9 million CPOs, which became fully vested upon achievement of the annual internal and/or external performance conditions in each of the three years. CPOs vested were delivered, fully unrestricted, to active executives in March 2015.

The combined compensation expense related to the programs described above in 2016, 2015 and 2014, recognized in the operating results, amounted to approximately Ps742, Ps655 and Ps730, respectively. The weighted average price per CPO granted during the period was approximately 13.79 pesos in 2016, 13.34 pesos in 2015 and 12.53 pesos in 2014. Moreover, the weighted average price per CEMEX Latam share granted during the period was approximately 13,423 colombian pesos in 2016, 14,291 colombian pesos in 2015 and 15,073 colombian pesos in 2014. As of December 31, 2016 and 2015, there were no options or commitments to make payments in cash to the executives based on changes in the market price of the Parent Company's CPO or CLH's shares.

### 22) EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is calculated by dividing profit or loss attributable to ordinary equity holders of the Parent Company (the numerator) by the weighted average number of shares outstanding (the denominator) during the period. Shares that would be issued depending only by the passage of time should be included in the determination of the basic weighted average number of shares outstanding. Diluted earnings (loss) per share should reflect in both, the numerator and denominator, the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions, to the extent that such assumption would led to a reduction in basic earnings per share or an increase in basic loss per share, otherwise, the effects of potential shares are not considered because they generate antidilution.

### Earnings (loss) per share — continued

The amounts considered for calculations of earnings (loss) per share in 2016, 2015 and 2014 were as follows:

	2016	2015	2014
Denominator (thousands of shares) Weighted average number of shares outstanding <sup>1</sup>	40,624,905 1,616,112	39,905,168 1,616,112	38,506,999 1,616,112
Effect of dilutive instruments — mandatorily convertible securities (note 16B) <sup>3</sup>	680,916	680,916	680,916
Weighted average number of shares — basic	42,921,933 226,972	42,202,196 171,747	40,804,027 293,657
Effect of potentially dilutive instruments — optionally convertible securities (note 16B) <sup>3</sup>	4,367,895	4,870,774	5,963,148
Weighted average number of shares — diluted	47,516,800	<u>47,244,717</u>	47,060,832
Numerator Net income (loss) from continuing operations Less: non-controlling interest net income	Ps 14,183 1,174	854 932	(5,770) 1,103
Controlling interest net income (loss) from continuing operations	13,009	(78)	(6,873)
securities	119	144	164
Controlling interest net income (loss) from continuing operations — for basic earnings per share calculations	13,128 1,079	66	(6,709) 1,424
Controlling interest net income (loss) from continuing operations — for diluted earnings per share calculations	<u>Ps 14,207</u>	1,354	(5,285)
Net income from discontinued operations	Ps 1,024	1,279	90
Basic Earnings (Loss) Per Share Controlling Interest Basic Earnings (Loss) Per Share	Ps 0.33	0.03	(0.16)
operations	0.31	0.03	(0.16)
•			
Controlling Interest Diluted Earnings (Loss) Per Share <sup>4</sup> Controlling Interest Diluted Earnings (Loss) Per Share	Ps 0.33	0.03	(0.16)
continuing operations	0.31	_	(0.16)
discontinued operations	0.02		

<sup>1</sup> The weighted average number of shares outstanding in 2015 and 2014 reflects the shares issued as a result of the capitalization of retained earnings declared on March 2015 and March 2014, as applicable (note 20A).

<sup>2</sup> According to resolution of the stockholders' meetings on March 31, 2016.

### Earnings (loss) per share — continued

- 3 The number of CPOs to be issued under the executive share-based compensation programs, as well as the total amount of CPOs committed for issuance in the future under the mandatorily and optionally convertible securities, are computed from the beginning of the reporting period. The number of shares resulting from the executives' stock option programs is determined under the inverse treasury method.
- 4 For 2016, 2015 and 2014, the effects on the denominator and numerator of potential dilutive shares generate antidilution; therefore, there is no change between the reported basic and diluted earning (loss) per share.

#### 23) COMMITMENTS

#### 23A) GUARANTEES

As of December 31, 2016 and 2015, CEMEX, S.A.B. de C.V., had guaranteed loans of certain subsidiaries for approximately US\$2,887 (Ps59,819) and US\$3,726 (Ps64,195), respectively.

#### 23B) PLEDGED ASSETS

CEMEX transferred to a guarantee trust the shares of its main subsidiaries, including CEMEX México, S.A. de C.V., New Sunward Holding B.V. and CEMEX España, S.A., and entered into pledge agreements in order to secure payment obligations under the Credit Agreement (formerly under the Facilities Agreement) and other debt instruments entered into prior to the date of these agreements (note 16A).

As of December 31, 2016 and 2015, there are no liabilities secured by property, machinery and equipment.

### 23C) OTHER COMMITMENTS

As of December 31, 2016 and 2015, CEMEX was party of other commitments for several purposes, including the purchase of fuel and energy, which estimated future cash flows over their maturity are presented in note 23E. A description of the most significant contracts is as follows:

- In connection with the beginning of full commercial operations of the Ventika S.A.P.I. de C.V. and the Ventika II S.A.P.I. de C.V. wind farms (jointly "Ventikas") located in the Mexican state of Nuevo Leon with a combined generation capacity of 252 Megawatts ("MW"), CEMEX agreed to acquire a portion of the energy generated by Ventikas for its Mexican Plants for a period of 20 years, which began in April 2016. During 2016, Ventikas supplied approximately 6.4% (unaudited) of CEMEX's overall electricity needs in Mexico. This agreement is for CEMEX's own use and there is no intention of energy trading. CEMEX participated in Ventikas project as sponsor, main developer and equity investor. On December 15, 2016, CEMEX sold its interest in Ventikas to Infraestructura Energética Nova, S.A.B. de C.V. ("IEnova"), current owner of 100% of Ventikas, for approximately US\$21 (Ps435). In addition, during 2016 and in accordance with the established contracts CEMEX also received a total of US\$35 (Ps725) for development fee and other concepts. CEMEX will remain as the manager of the Ventikas facilities in exchange of a management fee.
- On July 30, 2012, CEMEX signed a 10-year strategic agreement with International Business Machines
  Corporation ("IBM") pursuant to which IBM provides, among others, data processing services (back office)
  in finance, accounting and human resources; as well as Information Technology ("IT") infrastructure
  services, support and maintenance of IT applications in the countries in which CEMEX operates.
- Beginning in February 2010, CEMEX agreed with EURUS the purchase of electric energy for a period of no less than 20 years. EURUS is a wind farm with an installed capacity of 250 MW operated by ACCIONA in

#### Other commitments — continued

the Mexican state of Oaxaca. For the years 2016, 2015 and 2014, EURUS supplied (unaudited) approximately 22.9%, 28.0% and 28.2%, respectively, of CEMEX's overall electricity needs in Mexico during such year.

- CEMEX maintains a commitment initiated in April 2004 to purchase the energy generated by Termoeléctrica del Golfo ("TEG") until 2027. CEMEX committed to supply TEG and another third-party electrical energy generating plant adjacent to TEG all fuel necessary for their operations, a commitment that has been hedged through four 20-year agreements entered with Petróleos Mexicanos ("PEMEX"), which terminate in 2024. For the years ended December 31, 2016, 2015 and 2014, TEG supplied (unaudited) approximately 66.3%, 69.3% and 69.6% respectively, of CEMEX's overall electricity needs during such year for its cement plants in Mexico.
  - In regards with the above, in March 1998 and July 1999, CEMEX signed contracts with PEMEX providing that beginning in April 2004 PEMEX's refineries in Cadereyta and Madero City would supply CEMEX with a combined volume of approximately 1.75 million tons of petroleum coke per year. As per the petroleum coke contracts with PEMEX, 1.2 million tons of the contracted volume will be allocated to TEG and the other energy producer and the remaining volume will be allocated to CEMEX's operations in Mexico. By entering into the petroleum coke contracts with PEMEX, CEMEX expects to have a consistent source of petroleum coke throughout the 20-year term.
- In 2007, CEMEX Ostzement GmbH ("COZ"), CEMEX's subsidiary in Germany, entered into a long-term energy supply contract with Vattenfall Europe New Energy Ecopower ("VENEE"), pursuant to which VENEE committed to supply energy to CEMEX's Rüdersdorf plant for a period of 15 years starting on January 1, 2008. Based on the contract, each year COZ has the option to fix in advance the volume of energy in terms of MW that it will acquire from VENEE, with the option to adjust the purchase amount one time on a monthly and quarterly basis. According to the contract, COZ acquired (unaudited) approximately 27 MW in 2016, 2015 and 2014, and COZ expects to acquire between 26 and 28 MW per year starting in 2015 and thereafter. The contract, which establishes a price mechanism for the energy acquired, based on the price of energy future contracts quoted on the European Energy Exchange, did not require initial investments and was expected to be performed at a future date. Considering that the contract is for CEMEX's own use and CEMEX sells any energy surplus as soon as actual energy requirements are known, regardless of changes in prices and thereby avoiding any intention of trading in energy, such contract is not recognized at its fair value.

### 23D) COMMITMENTS FROM EMPLOYEE BENEFITS

In some countries, CEMEX has self-insured health care benefits plans for its active employees, which are managed on cost plus fee arrangements with major insurance companies or provided through health maintenance organizations. As of December 31, 2016, in certain plans, CEMEX has established stop-loss limits for continued medical assistance derived from a specific cause (e.g., an automobile accident, illness, etc.) ranging from 23 thousand dollars to 400 thousand dollars. In other plans, CEMEX has established stop-loss limits per employee regardless of the number of events ranging from 100 thousand dollars to 2.5 million dollars. The contingency for CEMEX if all employees qualifying for health care benefits required medical services simultaneously is significantly. However, this scenario is remote. The amount expensed through self-insured health care benefits was approximately US\$69 (Ps1,430) in 2016, US\$69 (Ps1,189) in 2015 and US\$64 (Ps943) in 2014.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### 23E) CONTRACTUAL OBLIGATIONS

As of December 31, 2016 and 2015, CEMEX had the following contractual obligations:

(U.S. dollars millions)	2016			2015			
	Less than 1 year		1-3 years	3-5 years	More than 5 years	Total	Total
Obligations							
Long-term debt	US\$	37	2,675	2,221	6,446	11,379	13,303
Capital lease obligations <sup>1</sup>		18	36	33	20	107	135
Convertible notes <sup>2</sup>		13	689	503		1,205	1,543
Total debt and other financial obligations <sup>3</sup>		68	3,400	2,757	6,466	12,691	14,981
Operating leases <sup>4</sup>		117	193	127	78	515	434
Interest payments on debt <sup>5</sup>		678	1,240	969	1,109	3,996	4,659
Pension plans and other benefits <sup>6</sup>		142	277	269	726	1,414	1,568
Purchases of raw materials, fuel and energy $^{7}$		584	816	739	2,301	4,440	3,963
Total contractual obligations	US\$	1,589	5,926	4,861	10,680	23,056	25,605
	Ps 3	32,934	122,787	100,720	221,290	477,720	441,174

- 1 Represent nominal cash flows. As of December 31, 2016, the NPV of future payments under such leases was US\$76 (Ps1,576), of which, US\$24 (Ps497) refers to payments from 1 to 3 years, US\$23 (Ps477) refer to payments from 3 to 5 years, and US\$16 (Ps332) refer payments of more than 5 years.
- 2 Refers to the components of liability of the convertible notes described in note 16B and assumes repayment at maturity and no conversion of the notes.
- 3 The schedule of debt payments, which includes current maturities, does not consider the effect of any refinancing of debt that may occur during the following years. In the past, CEMEX has replaced its longterm obligations for others of a similar nature.
- 4 The amounts represent nominal cash flows. CEMEX has operating leases, primarily for operating facilities, cement storage and distribution facilities and certain transportation and other equipment, under which annual rental payments are required plus the payment of certain operating expenses. Rental expense was US\$121 (Ps2,507) in 2016, US\$114 (Ps1,967) in 2015 and US\$112 (Ps1,657) in 2014.
- 5 Estimated cash flows on floating rate denominated debt were determined using the floating interest rates in effect as of December 31, 2016 and 2015.
- 6 Represents estimated annual payments under these benefits for the next 10 years (note 18), including the estimate of new retirees during such future years.
- Future payments for the purchase of raw materials are presented on the basis of contractual nominal cash flows. Future nominal payments for energy were estimated for all contractual commitments on the basis of an aggregate average expected consumption of 3,124.1 GWh per year using the future prices of energy established in the contracts for each period. Future payments also include CEMEX's commitments for the purchase of fuel.

#### 24) CONTINGENCIES

#### 24A) PROVISIONS RESULTING FROM LEGAL PROCEEDINGS

CEMEX is involved in various significant legal proceedings, the resolutions of which are deemed probable and imply cash outflows or the delivery of other resources owned by CEMEX. As a result, certain provisions or losses have been recognized in the financial statements, representing the best estimate of the amounts payable or

#### Provisions resulting from legal proceedings — continued

impaired assets. Therefore, CEMEX believes that it will not incur significant expenditure or losses in excess of the amounts recorded. As of December 31, 2016, the details of the most significant events giving effect to provisions or losses are as follows:

Regarding the Maceo project in Colombia (note 14), on August 28, 2012, CEMEX Colombia signed a memorandum of understanding ("MOU") with the representative of CI Calizas y Minerales S.A. ("CI Calizas"), which objective was the acquisition and transfer of assets comprising land, the mining concession and the environmental permit, the common shares of the entity Zona Franca Especial Cementera del Magdalena Medio S.A.S. ("Zomam") (holder of the free trade zone concession), as well as the beneficial rights of a trust entered between Acción Sociedad Fiduciaria S.A., CI Calizas and Zomam, to execute the construction of the new cement plant. During 2016, CEMEX received reports through its anonymous reporting line, related to possible deficiencies in the purchase process of land where the cement plant is located. At this respect, CEMEX initiated an investigation and internal audit in accordance with its corporate governance policies and its code of ethics, confirming the irregularities in such process. As a result of this process, on September 23, 2016, CLH and CEMEX Colombia decided to terminate employment relationship with the Vice President of Planning of CLH and CEMEX Colombia, and with the Legal Counsel of CLH and CEMEX Colombia. In addition, effective the same date September 23, 2016, the Chief Executive Officer of CLH and President of CEMEX Colombia resigned to facilitate investigations. CEMEX and CLH have made these findings known to the appropriate authorities in Colombia. In order to strengthen the levels of leadership, management and best practices of corporate governance, on October 4, 2016, the Board of Directors of CLH decided to separate the roles of Chairman of the Board of Directors, Chief Executive Officer of CLH and President of CEMEX Colombia. Consequently, new appointments for Chairman of the Board of Directors of CLH, new Chief Executive Officer of CLH, new President of CEMEX Colombia and new Vice President of Planning of CLH, were effective immediately.

In addition, after signing the original MOU, a former shareholder of CI Calizas, who presumptively transferred its shares of CI Calizas two years before the signing of the MOU, was linked to a process of expiration of property initiated by Colombia's Attorney General (the "Attorney General"). Amongst other measures, the Attorney General ordered the seizure and consequent suspension of the right to dispose the assets subject to the MOU. The shares of Zomam were fully acquired by CEMEX Colombia before the beginning of such process; nonetheless, the Attorney General decided to also include such shares in the action of expiration of property. To protect its interests and defend its rights as a third party acting in good faith and free of guilt, CEMEX Colombia joined the expiration of property process, attending promptly each procedural stages, under the policy of full cooperation with the Attorney General. Additionally, CEMEX Colombia requested the inadmissibility of the action of expiration of property against the assets subject to the MOU.

In July 2013, CEMEX Colombia signed with the provisional depository of the assets, designed by the Drugs National Department (*Dirección Nacional de Estupefacientes*, then depository of the affected assets), which functions after its liquidation were assumed by the Administrator of Special Assets (*Sociedad de Activos Especiales S.A.S.*) or the "SAE"), a lease contract for a period of five years, which can be early terminated by the SAE, by means of which CEMEX Colombia was duly authorized to continue with the necessary works for the construction and operation of the plant (the "Lease Contract"). Likewise, the provisional depository granted a mandate to CEMEX Colombia for the same purpose.

On May 2, 2016, the Attorney General resolved to deny CEMEX's Colombia inadmissibility request to the action for expiration of property mentioned above, considering that it should broaden the obtention of

#### Provisions resulting from legal proceedings — continued

probatory elements and its analisys in order to take a resolution according to law. Given on the nature of the process, despite the Colombian law has defined terms for the several procedural stages, as of December 31, 2016, it is estimated that the issuance of a final resolution in respect to the applicability or not for the action of expiration of property over the aforementioned assets may take between five and ten years. As of December 31, 2016, the expiration of property process is in its investigation stage, awaiting the appointment of the guardians *ad litem* designated by the Attorney General. The appointment of the guardian *ad litem* would open the probatory stage, in which evidence will be tested.

The maturity of the Lease Contract is July 15, 2018, therefore, subject to the resolution of the ongoing legal process, CEMEX Colombia plans to negotiate and extension to such Lease Contract.

Moreover, in connection with Maceo's project, CEMEX Colombia also engaged the same representative of CI Calizas to also represent CEMEX Colombia in the acquisition of land adjacent to the plant, signing a new memorandum of understanding with this representative (the "MOU with the Representative"). CEMEX Colombia made cash advances to this representative for amounts in Colombian pesos equivalent to approximately US\$13.4 and has paid interest for approximately US\$1.2, in both cases considering the Colombian peso to U.S. dollar exchange rate as of December 31, 2016. These payments were deposited in the representative's personal bank account as advance payments for CI Calizas' assets and for the purchase in the name and on behalf of CEMEX Colombia under the MOU with the Representative of Maceo's project adjacent land, interest was paid by CEMEX Colombia according to the representative's instructions. Pursuant to the expiration of property process of the assets subject to the MOU and the failures to legally formalize the purchases under the MOU with the Representative, as of the reporting date, CEMEX Colombia is not the legitimate owner of the aforementioned assets. Moreover, considering that payments made by CEMEX Colombia for the purchase of property, shares and transfer of the mining contract and the environmental permit, as well as the land adjacent to the manufacturing plant, were made in violation of CEMEX's and CLH's internal policies, both CLH and CEMEX Colombia reported these facts to the Attorney General, providing the findings obtained during the investigations and internal audits, in order for the Attorney General to take any actions it may deemed relevant. On December 20, 2016, CEMEX Colombia filed an extension of the original complaint of September 23, 2016, with information and findings obtained to date.

Pursuant to a requirement of CEMEX, S.A.B. de C.V.'s Audit Committee and of CLH's Audit Commission, an audit firm, experts in forensic audits, was engaged in order to perform an independent investigation of Maceo's project. Aditionally, CEMEX Colombia and CLH engaged an external lawyers firm with the aim of assisting CLH and CEMEX Colombia on the necessary collaboration with the Attorney General. Moreover, considering CLH's internal controls and usual best practices, management also engaged a team of external lawyers for its own legal advice. In relation to the irregularities detected in the purchase of CI Calizas' assets and the aforementioned additional land, which led to the execution of the internal audit, the termination of employment of certain executives and the report of these findings, there is an ongoing investigation by the Attorney General. As of the financial statements date, the investigation by the Attorney General is in its initial stage (inquiry), in which CEMEX is neither able to predict the actions that the Attorney General could implement, nor the possibility and degree in which any of these possible actions, including the termination of employment of the aforementioned executives, could have a material adverse effect on CEMEX's results of operation, liquidity or financial position. At this respect, under the presumption that CEMEX Colombia conducted itself in good faith, and considering that the rest of its investments made in the development of Maceo's project were made with the consent of the SAE and CI

#### Provisions resulting from legal proceedings — continued

Calizas by virtue of the lease contract and the mandate, such investments are protected by Colombian law, under which, if a person builds on the property of a third party, with full knowledge of such third party, this third party may: a) take ownership of the plant, provided a corresponding indemnity to CEMEX Colombia, or otherwise, b) oblige CEMEX Colombia to purchase the land.

Considering this, CEMEX estimates that, during the term of the Lease Contract, it will be able to use and enjoy the land in order to operate the plant. Moreover, CEMEX considers that will be able to retain ownership of the plant and other refurbishments made. Nonetheless, had this not be the case, CEMEX Colombia would take all necessary actions to safeguard the project in Maceo. At this respect, there is the possibility that CEMEX considers remote, in which, in the event that the expiration of property over the assets subject to the MOU is ordered in favor of the State, the SAE may decide not to sell the assets to CEMEX Colombia, or, the SAE may elect to maintain ownership of the assets and not extend the Lease Contract. In both cases, under Colombian law, CEMEX Colombia would be entitled to an indemnity for the amount of its incurred investments. However, an adverse resolution at this respect could have a material adverse effect on the Company's results of operations, liquidity or financial condition.

In connection with the investigation and internal audit related to Maceo's project, and considering the findings and the legal opinions available, during the fourth quarter of 2016, CEMEX determined that: a) there is low probability of recover resources delivered under different memorandums of understanding for the purchase of the assets related to the project for an amount in Colombian pesos equivalent to approximately US\$14.3 (Ps295), which were recognized as part of investments in progress, have been considered as contingent assets and therefore were reduced to zero recognizing an impairment loss for such amount against other expenses, net (nonetheless, on December 19, 2016, CEMEX filed a claim in the civil courts aiming that all property rights related to the additional land, some of which were assigned to the representative, would be effectively transferred to CEMEX); b) certain purchases of equipment installed in the plant were considered exempt for VAT purposes under the benefits of the free trade zone, however, as those assets were actually installed outside of the free trade zone's area, they lack of such benefits, therefore, CEMEX increased investments in progress against VAT accounts payable for approximately US\$9.2 (Ps191); and c) the cancellation of the balance payable to CI Calizas under the MOU in connection with the acquisition of the assets for approximately US\$9.1 (Ps188) against a reduction in investments in progress, all these amounts considering the Colombian peso to U.S. dollar exchange rate as of December 31, 2016.

On October 27, 2016, CLH communicated its decision to postpone the start-up of Maceo plant, for the following reasons that emerged from the audits already in progress: (i) there are pending permits required to finalize the road access to the plant at Maceo. In the event that those permits are obtained, CLH estimates that road access could be concluded and be ready for use until July 2017. Using the only existing access to the plant instead of the one under construction, would risk the safety of the operation and would probably limit the capacity to transport products from the plant at Maceo; (ii) CEMEX Colombia has requested an expansion to the free trade zone; to commission the new clinker line at Maceo without such expansion would risk CEMEX's capability to consolidate the fiscal benefits that would otherwise be available for CEMEX Colombia. It is possible that a final decision cannot be taken, with respect to the expansion of the free trade zone, due to the process of domain extinction already on course. With the objective of protecting the benefits to be had with the free trade zone, CLH will not commission the clinker line until the free trade zone is expanded to cover the totality of the cement plant at Maceo; and (iii) a subsidiary of CEMEX Colombia holds the environmental permit for project Maceo, however, the transfer of the mining concession was revoked by the Antioquia Mining Government Ministry in December 2013, hence was reassigned to CI Calizas. As a result, the environmental permit and the mining concession are in custody of different entities, contrary to standar situation.

#### Provisions resulting from legal proceedings — continued

In any case, CEMEX Colombia will continue using the assets under the Lease Contract and the mandate with the SAE.

CLH has also determined that the mining permit of the new plant partially overlaps with and integrally managed district. CEMEX Colombia has also confirmed that the environmental permit needs modifications in order to allow incrementing production up to 950 thousand tons per year. It is possible that this process could be affected by the process of expiration of property currently on course. CEMEX Colombia will continue to work to address these matters as soon as possible. At this respect, on December 13, 2016, Corantioquia, the regional environmental agency, communicated its negative resolution to CEMEX Colombia's request to increase the mining concession for up to 950 thousand tons per year. This resolution was appealed within the following ten days.

- In December 2016, CEMEX, S.A.B. de C.V. received subpoenas from the United States Securities and Exchange Commission ("SEC") seeking information that may allow determining whether there are violations of the U.S. Foreign Corrupt Practices Act in connection with Maceo's project. These subpoenas do not mean that the SEC has concluded that CEMEX has broken the law. CEMEX's and CLH's internal audits and investigations question certain payments made in connection with Maceo's project under the MOU and the MOU with the Representative described above. These payments were made to non-governmental individuals in connection with the purchase of the factory land, advacent land, mining rights and the benefits of the free trade zone of Maceo's project, were made in breach of CEMEX and CLH established protocols. CEMEX has been cooperating with the SEC and the Attorney General and intends to continue cooperating fully with the SEC and the Attorney General. It is possible that the United States Department of Justice or investigatory entities in other jurisdictions may also open investigations into this matter. To the extent they do so, CEMEX intends to cooperate fully with those inquiries, as well. As of December 31, 2016, CEMEX is neither able to predict the duration, scope, or outcome of the SEC investigation or any other investigation that may arise, nor has elements to determine the probability that the SEC's investigation results may or may not have a material adverse impact on its consolidated results of operations, liquidity or financial position.
- In January 2007, the Polish Competition and Consumers Protection Office (the "Protection Office") notified CEMEX Polska Sp. Z.o.o. ("CEMEX Polska"), a subsidiary of CEMEX in Poland, about the initiation of an antitrust proceeding against all cement producers in the country, including CEMEX Polska and another of CEMEX's indirect subsidiaries in Poland. The Protection Office alleged that there was an agreement between all cement producers in Poland regarding prices, market quotas and other sales conditions; and that the producers exchanged information, all of which limited competition in the Polish cement market. CEMEX Polska denied that it had committed the practices listed by the Protection Office, and submitted formal comments and objections gathered during the proceeding supporting its position that its activities were in line with Polish competition law. In December 2009, the Protection Office issued a resolution imposing fines on a number of Polish cement producers, including CEMEX Polska for the period of 1998 to 2006. The fine imposed on CEMEX Polska amounted to the equivalent of approximately US\$27 (Ps559). In December 2009, CEMEX Polska filed an appeal before the Polish Court of Competition and Consumer Protection in Warsaw (the "First Instance Court"). In December 2013, the First Instance Court reduced the penalty imposed on CEMEX Polska to the equivalent of approximately US\$24 (Ps497). In May 2014, CEMEX Polska filed an appeal against the First Instance Court judgment before the Appeals Court in Warsaw. After several hearings, on March 11, 2016, the Appeals Court reopened the hearing phase which had been closed in February 2016. The Appeals Court will ask certain questions to the Polish Constitutional

#### Provisions resulting from legal proceedings — continued

Tribunal regarding the conformity with the Polish Constitution of the calculation of the reduced penalty imposed on CEMEX Polska. The above-mentioned penalty is not enforceable until the Appeals Court issues its final judgment and if the penalty is maintained in the final resolution, then it will be payable within 14 calendar days of the announcement. As of December 31, 2016, CEMEX had accrued a provision equivalent to approximately US\$24 (Ps497), representing the best estimate in connection with this resolution. CEMEX Polska estimates that the final judgment will be issued during the second half of 2018. As of December 31, 2016, CEMEX does not expect this matter would have a material adverse impact on its results of operations, liquidity or financial condition.

- In August 2005, Cartel Damages Claims, S.A. ("CDC"), a Belgian company established in the aftermath of the German cement cartel investigation that took place from July 2002 to April 2003 with the purpose of purchasing potential damage claims from consumers and pursuing those claims against the cartel participants, filed a lawsuit in the District Court in Düsseldorf, Germany, against CEMEX Deutschland AG, a subsidiary of CEMEX in Germany, and other German cement companies in respect of damage claims relating to alleged price and quota fixing by German cement companies between 1993 and 2002. CDC has brought claims for an amount equivalent of approximately US\$142. After several resolutions by the District Court in Düsseldorf over the years, court hearings and appeals from the defendants, in December 2013 the District Court in Düsseldorf issued a resolution by means of which all claims brought to court by CDC were dismissed on the grounds that the way CDC obtained the claims was illegal given the limited risk it faced for covering the litigation costs and that the acquisition of the claims also breached rules that make the provision of legal advice subject to public authorization. In January 2014, CDC filed an appeal to the Higher Regional Court in Düsseldorf. On February 18, 2015, the Court of Appeals in Düsseldorf fully rejected CDC's appeal and maintained the first instance decision. The Court of Appeals in Düsseldorf expressly did not admit a second appeal against this decision. The Court of Appeals decision is final and binding. Therefore, in 2015, CEMEX canceled the provision accrued until December 31, 2014 of approximately US\$36.
- As of December 31, 2016, CEMEX had accrued environmental remediation liabilities in the United Kingdom pertaining to closed and current landfill sites for the confinement of waste, representing the NPV of such obligations for an amount in British pounds sterling equivalent to approximately US\$161 (Ps3,345). Expenditure was assessed and quantified over the period in which the sites have the potential to cause environmental harm, which was accepted by the regulator as being up to 60 years from the date of closure. The assessed expenditure included the costs of monitoring the sites and the installation, repair and renewal of environmental infrastructure.
- As of December 31, 2016, CEMEX had accrued environmental remediation liabilities in the United States for an amount of approximately US\$34 (Ps704), related to: a) the disposal of various materials in accordance with past industry practice, which might currently be categorized as hazardous substances or wastes, and b) the cleanup of sites used or operated by CEMEX, including discontinued operations, regarding the disposal of hazardous substances or waste, either individually or jointly with other parties. Most of the proceedings are in the preliminary stages, and a final resolution might take several years. Based on the information developed to date, CEMEX's does not believe that it will be required to spend significant sums on these matters in excess of the amounts previously recorded. The ultimate cost that may be incurred to resolve these environmental issues cannot be assured until all environmental studies, investigations, remediation work and negotiations with, or litigation against, potential sources of recovery have been completed.

#### 24B) OTHER CONTINGENCIES FROM LEGAL PROCEEDINGS

CEMEX is involved in various legal proceedings, which have not required the recognition of accruals, considering that the probability of loss is less than probable or remote. In certain cases, a negative resolution may represent the revocation of an operating license, in which case, CEMEX may experience a decrease in future revenues, an increase in operating costs or a loss. Nonetheless, until all stages in the procedures are exhausted in each proceeding, CEMEX cannot assure the obtention of a final favorable resolution. As of December 31, 2016, the most significant events with a quantification of the potential loss, when it is determinable and would not impair the outcome of the relevant proceeding, were as follows:

- In September 2014, the National Markets and Competition Commission (*Comisión Nacional de los Mercados y la Competencia* or the "CNMC"), in the context of an investigation of the Spanish cement, ready-mix concrete and related products industry regarding alleged anticompetitive practices, inspected one of CEMEX's facilities in Spain. In January 2015, CEMEX España Operaciones, S.L.U., was notified of the initiation by the CNMC of a disciplinary proceeding for alleged prohibited conducts, and in November 2015, such entity was notified of alleged anticompetitive practices in 2009 for the cement market and the years 2008, 2009, 2012, 2013 and 2014 for the ready-mix market. CEMEX España Operaciones, S.L.U. believes that it has not breached any applicable laws. On September 8, 2016, CEMEX España Operaciones, S.L.U. was notified of a decision issued by the CNMC pursuant to which CEMEX España Operaciones, S.L.U. has been required to pay a fine of approximately €6 (US\$7 or Ps145). CEMEX España Operaciones, S.L.U. filed an appeal against the CNMC resolution and requested the suspension of payment of the fine. As of December 31, 2016 the resolution is still pending.
- On February 9, 2014, the Egyptian Ministry of Finance's Appeals Committee (the "Appeals Committee") notified a resolution to Assiut Cement Company ("ACC"), a subsidiary of CEMEX in Egypt, by means of which the Egyptian Tax Authority is requiring the payment of a development levy on clay applied to the Egyptian cement industry in amounts equivalent as of December 31, 2016 of approximately US\$17 (Ps352) for the period from May 5, 2008 to November 30, 2011. On March 10, 2014, ACC filed a claim before the North Cairo Court requesting the nullification of the Appeals Committee decision. In parallel, ACC filed a request before the Ministerial Committee for Resolution of Investment Disputes (the "Ministerial Committee") claiming non-entitlement of the Egyptian Tax Authority to the levy on clay during the reference period, and from cement produced using imported clinker. On September 28, 2015, ACC was notified of a resolution by the Ministerial Committee pursuant to which the Egyptian Tax Authority would be instructed to cease claiming ACC the aforementioned payment of the levy on clay. It was further decided that the levy on clay should not be imposed on imported clinker. The Ministerial Committee's resolution strongly supports ACC position in this case, given the fact that it is legally binding on the Egyptian Tax Authority. During 2016 the Ministerial Committee's resolution was submitted to the Egyptian Tax Authority, which in turn issued a settlement memorandum whereby it confirmed and recognized the Ministerial Committee's resolution. Nonetheless, on May 28, 2016, the Egyptian Tax Authority challenged before the North Cairo Court ACC's right to cancel the levy on clay. ACC expects that the document to be submitted by the attorney for the State at the upcoming North Cairo Court's session scheduled for October 10, 2016 and December 27, 2016, shall request that the jointly reviewed cases to be struck off the court's roll, but no session has yet been scheduled before the Cairo Administrative Judiciary Court in order to review the two referred cases. At this stage, as of December 31, 2016, CEMEX does not expect a material adverse impact due to this matter in its results of operations, liquidity or financial position.
- On September 5, 2013, the Colombian Superintendence of Industry and Commerce (Superintendencia de Industria y Comercio the "SIC") opened an investigation against five cement companies and 14 directors of those companies, including CEMEX Colombia, its former legal representative and the current President of

#### Other contingencies from legal proceedings — continued

CEMEX Colombia, for allegedly breaching rules which prohibit: a) to limit free competition and/or determining or maintaining unfair prices; b) direct or indirect price fixing agreements; and c) any market sharing agreements between producers or distributors. In connection with the 14 executives under investigation, the SIC may sanction any individual who collaborated, facilitated, authorized, executed or tolerated behavior that violates free competition rules. On October 7, 2013, CEMEX Colombia responded the resolution and submitted evidence in its relief. If the alleged infringements are substantiated, penalties may be imposed by the SIC against each company being declared in breach of the competition rules for an equivalent of up to US\$19 (Ps394) for each violation, and an equivalent of up to US\$1 (Ps21) against those individuals found responsible. CEMEX cannot determine when a final decision by the SIC would be issued. As of December 31, 2016, CEMEX is not able to assess the likelihood of the SIC imposing any measures and/or penalties against CEMEX Colombia, but if any penalties are imposed, would not have a material adverse effect on CEMEX's results of operations, liquidity or financial condition.

- On September 13, 2012, in connection with a lawsuit submitted to a first instance court in Assiut, Egypt and notified on May 23, 2011 to ACC, the first instance court of Assiut issued a resolution in order to nullify the Share Purchase Agreement (the "SPA") pursuant to which CEMEX acquired a controlling interest in ACC. In addition, on April 7, 2011 and March 6, 2012, lawsuits seeking, among other things, the annulment of the SPA were filed by different plaintiffs, including 25 former employees of ACC, before Cairo's State Council. On January 20, 2014, the Appeals Court in Assiut, Egypt, issued a judgment revoking the court's resolution and referring the matter to an administrative court in Assiut (the "Assiut Administrative Court"). Moreover, on February 23, 2014, in connection with the above, three plaintiffs filed a lawsuit before the Assiut Administrative Judiciary Court requesting the cancellation of the resolutions taken by the shareholders of Metallurgical Industries Company ("MIC") in connection with the sale of ACC's shares and negotiation of the SPA. In a related matter, on April 22, 2014, the Presidential Decree on Law No. 32 of 2014 ("Law 32/2014"), which regulates legal actions to challenge agreements entered into by the Egyptian State and third parties, become effective, but still subject to approval by the House of Representatives. On October 15, 2014, the Assiut Administrative Court referred the case to the Administrative Judiciary Court of Assiut. During March 2015, the Court's State Commissioner Authority ("SCA") recommended the 7th and 8th Circuits of Cairo's State Council Administrative Judiciary Court to suspend the proceedings until the High Constitutional Court pronounces itself with regards to the challenges against the constitutionality of the Law 32/2014. At a session held on September 3, 2015, the 7th Circuit of Cairo's State Council Administrative Judiciary Court accepted the SCA's report recommendation and ruled for staying the proceedings until the High Constitutional Court pronounces itself with regards to the challenges against the constitutionality of Law No. 32/2014.
- In connection with the preceding paragraph, on January 26, 2016, the 8th Circuit of Cairo's State Council Administrative Judiciary Court ruled for the dismissal of this case considering the plaintiff's lack of standing. This ruling was no appealed by the plaintiff accordingly; such ruling is final and definitive. In October 2015, the SCA, recommended that due to the absence of geographical jurisdiction to review the case, it should be referred to the 7th Circuit of "Economic and Investment Disputes" of Cairo's State Council Administrative Judiciary Court. On February 24, 2016, the Assiut Administrative Judiciary Court decided to refer the case to the First Circuit of "Economic and Investment Disputes" of Cairo's State Council Administrative Judiciary Court, which as of the reporting date, has not notified ACC of any session to review the case. During October and November 2015, parliamentary elections to the House of Representatives took place and the elected House of Representatives started to hold its sessions on January 10, 2016, as expected, and Law 32/2014 was discussed and ratified on January 20, 2016, as legally

#### Other contingencies from legal proceedings — continued

required. As of December 31, 2016, several constitutional challenges have been filed against Law 32/2014 before the High Constitutional Court. In consideration of the aforementioned, after several resolutions, hearings and appeals in these cases over the years, as of December 31, 2016, CEMEX is not able to assess the likelihood of an adverse resolution regarding these lawsuits nor is able to assess if the Constitutional Court will dismiss Law 32/2014, but, regarding the lawsuits, if adversely resolved, CEMEX does not believe the resolutions in the first instance would have an immediate material adverse impact on CEMEX's operations, liquidity and financial condition. However, if CEMEX exhausts all legal recourses available, a final adverse resolution of these lawsuits, or if the Constitutional Court dismisses Law 32/2014, this could adversely impact the ongoing matters regarding the SPA, which could have a material adverse impact on CEMEX's operations, liquidity and financial condition.

- In 2012, in connection with a contract (the "Quarry Contract") entered into in 1990 by CEMEX Granulats Rhône Méditerranée ("CEMEX GRM"), one of CEMEX's subsidiaries in France, with SCI La Quinoniere ("SCI") pursuant to which CEMEX GRM has drilling rights in order to extract reserves and do quarry remediation at a quarry in the Rhône region of France, SCI filed a claim against CEMEX GRM for breach of the Quarry Contract, requesting the rescission of the Quarry Contract and damages plus interest for an amount in euros equivalent to approximately US\$58 (Ps1,202), resulting from CEMEX GRM having partially filled the quarry allegedly in breach of the terms of the Quarry Contract. After many hearings, on May 18, 2016, CEMEX GRM was notified about an adverse judgment in this matter by the corresponding court in Lyon, France, primarily ordering the rescission of the Quarry Contract and the aforementioned payment for damages plus interest. On June 6, 2016, CEMEX GRM filed an appeal with the appeals court in Lyon, France and on September 5, 2016, CEMEX GRM filed the first submission of the full appeal together with its arguments and evidence. Proceedings on any additional hearings regarding this appeal or any other actions CEMEX GRM may initiate in this matter could take approximately 18 months to be finalized. As of December 31, 2016, CEMEX considers that an adverse resolution on this matter would have a material adverse impact on CEMEX's results of operations, liquidity and financial condition.
- On June 21, 2012, one of CEMEX's subsidiaries in Israel was notified about a class action suit against it and other three companies filed by a homeowner who built his house with concrete supplied by CEMEX in October of 2010. The class action argues that the concrete supplied to him did not meet with the Israeli ready-mix strength standard requirements and that as a result CEMEX acted unlawfully toward all of its customers who received concrete that did not comply with such standard requirements. As per the application, the plaintiff claims that the supply of the alleged non-conforming concrete has caused financial and non-financial damages to those customers, including the plaintiff. CEMEX presumes that the class action would represent the claim of all the clients who purchased the alleged non-conforming concrete from its subsidiary in Israel during the past 7 years, the limitation period according to applicable laws in Israel. The damages that could be sought an equivalent approximately US\$71 (Ps1,471). CEMEX's subsidiary submitted a formal response to the corresponding court. The applicant requested the court to join all claims brought by him. In a hearing held on December 20, 2015, the preliminary proceeding was completed and the court set dates for hearing evidence on May 8, 10 and 16, 2016. Moreover, the court decided to join together all claims against all four companies, including CEMEX's subsidiary in Israel, in order to simplify and shorten court proceedings, however, the court has not formally decided to join together all claims. As of December 31, 2016, CEMEX's subsidiary in Israel is not able to assess the likelihood of the class action application being approved or, if approved, of an adverse result, such as an award for damages in the full amount that could be sought, but if adversely resolved CEMEX does not believe that the final resolutions would have a material adverse impact on its results of operations, liquidity or financial condition.

#### Other contingencies from legal proceedings — continued

- On June 5, 2010, the District of Bogota's Environmental Secretary (the "Environmental Secretary"), ordered the suspension of CEMEX Colombia's mining activities at El Tunjuelo quarry, located in Bogota, as well as those of other aggregates producers in the same area. The Environmental Secretary alleged that during the past 60 years, CEMEX Colombia and the other companies have illegally changed the course of the Tunjuelo River, have used the percolating waters without permission and have improperly used the edge of the river for mining activities. In connection with the injunction, on June 5, 2010, CEMEX Colombia received a notification from the Environmental Secretary informing the initiation of proceedings to impose fines against CEMEX Colombia based on the above mentioned alleged environmental violations. CEMEX Colombia responded to the injunction by requesting that it be revoked based on the fact that the mining activities at El Tunjuelo quarry are supported by the authorizations required by the applicable environmental laws and that all the environmental impact statements submitted by CEMEX Colombia have been reviewed and permanently authorized by the Ministry of Environment and Sustainable Development. On June 11, 2010, the local authorities in Bogota, in compliance with the Environmental Secretary's decision, sealed off the mine to machinery and prohibited the removal of CEMEX's aggregates inventory. Although there is not an official quantification of the possible fine, the Environmental Secretary has publicly declared that the fine could be up to the equivalent of approximately US\$95 (Ps1,968). The temporary injunction does not currently compromise the production and supply of ready-mix concrete to CEMEX's clients in Colombia. At this stage, CEMEX is not able to assess the likelihood of an adverse result or potential damages which could be borne by CEMEX Colombia. An adverse resolution on this case could have a material adverse impact on CEMEX's results of operations, liquidity or financial condition.
- In January 2009, in connection with federal quarry permits granted to CEMEX Construction Materials Florida, LLC ("CEMEX Florida"), one of CEMEX's subsidiaries in the United States, a judge from the U.S. District Court for the Southern District of Florida ordered the withdrawal of the federal quarry permits of CEMEX Florida's SCL, FEC and Kendall Krome quarries, in the Lake Belt area in South Florida. The judge ruled that there were deficiencies in the procedures and analysis undertaken by the Army Corps of Engineers (the "Engineers") in connection with the issuance of the permits. In January 2010, the Engineers concluded a review and issued a decision supporting the issuance of new federal quarry permits for the SCL and FEC quarries. In February 2010, new quarry permits were granted to the SCL and FEC quarries. A number of potential environmental impacts must be addressed at the wetlands located at the Kendall Krome site before a new federal quarry permit may be issued for mining at that quarry. If CEMEX Florida is unable to maintain the new Lake Belt permits, CEMEX Florida would need to source aggregates, to the extent available, from other locations in Florida or import aggregates. The cessation or significant restriction of quarrying operations in the Lake Belt area could have a significant adverse impact on CEMEX's results of operations, liquidity or financial condition.
- In connection with an action brought against CEMEX Colombia in 2005, on July 28, 2015, the Superior Court of Bogota upheld its resolution in respect that CEMEX Colombia was not responsible for the premature distress of the concrete slabs of the *Autopista Norte* line of *Transmilenio* system and as such finalized such action. In addition, six actions related to the premature distress were brought against CEMEX Colombia, of which, the Cundinamarca Administrative Court nullified five of these actions and currently, only one remains outstanding. In addition, the Urban Development Institute ("UDI") filed another action alleging that CEMEX Colombia made deceiving advertisements on the characteristics of the flowable fill used in the construction of the line. CEMEX Colombia participated in this project solely and exclusively as supplier of the ready-mix concrete and flowable fill, which were delivered and received to the satisfaction of the contractor, fulfilling all the required technical specifications, and did not participate or had any

#### Other contingencies from legal proceedings — continued

responsibility on the design or technical specifications of construction. On May 31, 2016, the Civil Court of Bogota settled the action filed by the UDI ruling that the flowable fill was not what caused the damage to the slabs but by design changes when executing the road without consulting the original designer and to the lack of drains. The UDI filed an appeal against the court's ruling. On December 7, 2016, the Superior Court of Bogota upheld the Civil Court of Bogota's decision. As of December 31, 2016, CEMEX is not able to accurately assess the likelihood of an adverse result in these proceedings, but if adversely resolved, they could have a material adverse impact on CEMEX's results of operations, liquidity or financial condition.

In connection with the legal proceedings presented in notes 24A and 24B, the exchange rates as of December 31, 2016 used by CEMEX to convert the amounts in local currency to their equivalents in dollars were the official closing exchange rates of approximately 4.21 Polish zloty per dollar, 0.95 euro per dollar, 0.81 British pound sterling per dollar, 3,000.72 Colombian pesos per dollar and 3.85 Israelite shekel per dollar.

In addition to the legal proceedings described above in notes 24A and 24B, as of December 31, 2016, CEMEX is involved in various legal proceedings of minor impact that have arisen in the ordinary course of business. These proceedings involve: 1) product warranty claims; 2) claims for environmental damages; 3) indemnification claims relating to acquisitions or divestitures; 4) claims to revoke permits and/or concessions; and 5) other diverse civil actions. CEMEX considers that in those instances in which obligations have been incurred, CEMEX has accrued adequate provisions to cover the related risks. CEMEX believes these matters will be resolved without any significant effect on its business, financial position or results of operations. In addition, in relation to certain ongoing legal proceedings, CEMEX is sometimes able to make and disclose reasonable estimates of the expected loss or range of possible loss, as well as disclose any provision accrued for such loss, but for a limited number of ongoing legal proceedings, CEMEX may not be able to make a reasonable estimate of the expected loss or range of possible loss or may be able to do so but believes that disclosure of such information on a case-by-case basis would seriously prejudice CEMEX's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, CEMEX has disclosed qualitative information with respect to the nature and characteristics of the contingency, but has not disclosed the estimate of the range of potential loss.

### 25) RELATED PARTIES

All significant balances and transactions between the entities that constitute the CEMEX group have been eliminated in the preparation of the consolidated financial statements. These balances with related parties resulted primarily from: (i) the sale and purchase of goods between group entities; (ii) the sale and/or acquisition of subsidiaries' shares within the CEMEX group; (iii) the invoicing of administrative services, rentals, trademarks and commercial name rights, royalties and other services rendered between group entities; and (iv) loans between related parties. Transactions between group entities are conducted on arm's length terms based on market prices and conditions. When market prices and/or market conditions are not readily available, CEMEX conducts transfer pricing studies in the countries in which it operates to assure compliance with regulations applicable to transactions between related parties. The definition of related parties includes entities or individuals outside the CEMEX group, which, pursuant to their relationship with CEMEX, may take advantage of being in a privileged situation. Likewise, this applies to cases in which CEMEX may take advantage of such relationships and obtain benefits in its financial position or operating results. CEMEX's transactions with related parties are executed under market conditions.

#### **Related parties** — continued

As of December 31, 2016, except for the top management executives, CEMEX has not identified other transactions between related parties:

• For the years ended December 31, 2016, 2015 and 2014, the aggregate amount of compensation of CEMEX board of directors, including alternate directors, and top management executives, was approximately US\$43 (Ps802), US\$36 (Ps579) and US\$68 (Ps909), respectively. Of these amounts, approximately US\$32 (Ps595) in 2016, US\$25 (Ps402) in 2015 and US\$35 (Ps464) in 2014, was paid as base compensation plus performance bonuses, including pension and post-employment benefits. In addition, approximately US\$11 (Ps207) in 2016, US\$11 (Ps177) in 2015, and US\$33 (Ps444) in 2014 of the aggregate amount in each year, corresponded to allocations of CPOs under CEMEX's executive share-based compensation programs. In 2014, the amount of CPOs allocated included approximately US\$4 (Ps52), of compensation earned under the program that is linked to the fulfillment of certain performance conditions and that was payable through March 2015 to then still active members of CEMEX, S.A.B. de C.V.'s board of directors and top management executives (note 21).

### **26) SUBSEQUENT EVENTS**

• In connection with the Offer to purchase TCL's shares (note 13A), on January 9, 2017, Sierra presented a change and variation notice making an amended offer (the "Amended Offer") to the Offer to acquire up to 132,616,942 ordinary shares in TCL. Pursuant to the Amended Offer, Sierra offered TTPs5.07 in cash per TCL share (the "Revised Offer Price") and, except for shareholders of TCL in Barbados, shareholders of TCL will have the option to be paid for their TCL shares in TTPs or in dollars. Full acceptance of the Offer, as amended by the Amended Offer, in TTPs would result in a cash payment by Sierra of approximately TTPs672 million (US\$101 or Ps2,093). The Revised Offer Price represents a premium of 50% over the December 1, 2016 closing price of TCL's shares in the Trinidad and Tobago Stock Exchange. Among other conditions, the Amended Offer was still conditional on Sierra acquiring at least an amount of TCL shares that would allow CEMEX to consolidate TCL for financial reporting purposes. Unless extended, the Amended Offer period is expected to close on January 24, 2017. Sierra does not currently expect to extend the Offer period after January 24, 2017. All other terms and conditions of the Offer not modified by the Amended Offer remained unchanged.

Moreover, on January 24, 2017, Sierra communicated that having received the Foreign Investment License from the Trinidad and Tobago Ministry of Finance, all terms and conditions have been complied with or waived and the Offer has accordingly been declared unconditional. In addition, the Offer closed in Jamaica on February 7, 2017. Sierra acquired all TCL shares deposited pursuant to the Offer up to the maximum number of the Offered Shares. TCL shares deposited in response to the Offer together with Sierra's existing shareholding in TCL represented approximately 69.83% of the outstanding TCL shares. The total consideration paid by Sierra for the TCL shares was approximately US\$86. After conclusion of the Offer, CEMEX consolidates TCL for financial reporting purposes beginning February 1, 2017.

• On January 25, 2017, in connection with CEMEX's investment in GCC shares (notes 12A and 13A), the Parent Company and GCC announced that they will commence offerings that are expected to include an aggregate of up to 76,483,332 shares of the common stock (the "Shares") of GCC currently owned by CEMEX at a price range of between 95.00 to 115.00 pesos per share, which includes 9,976,087 shares available to the underwriters of the offerings pursuant to a 30-day option to purchase such shares expected to be granted to them by CEMEX. Such offerings are expected to be comprised of Shares to be offered: (a) in a public offering to investors in Mexico conducted through the MSE; and (b) in a concurrent private placement to eligible investors outside of Mexico. The size and timing of the offerings will depend on market and other conditions.

#### Subsequent events — continued

- In connection with the sale of the Concrete Pipe Business in the United States to Quikrete described in note 4A, on January 31, 2017, after the satisfaction of certain conditions precedent including approval from regulators. CEMEX announced the closing of the transaction according to the agreed upon price conditions.
- On February 10, 2017, CEMEX and GCC announced that they priced their previously announced secondary offerings of 51,750,000 shares of the Shares, owned by CEMEX, at a price of Mexican pesos 95 per share. Such offerings were comprised of Shares offered (a) in a public offering to investors in Mexico authorized by the Mexican National Banking and Securities Commission conducted through the MSE; and (b), in a concurrent private placement, to eligible investors outside of Mexico. CEMEX sold 13.53% of its 23% direct ownership interest in GCC. After the offerings, CEMEX owns a 9.47% direct interest in GCC and also have a minority interest in CAMCEM, an entity which owns a majority interest in GCC.
- On February 10, 2017, CEMEX finalize the divestment of its Fairborn, Ohio cement plant and cement terminal in Columbus, Ohio to a subsidiary of Eagle Materials, Inc. for approximately US\$400.
- On February 13, 2017, CEMEX announced that commenced a tender offer (the "Tender Offer") to purchase up to US\$475 (the "Aggregate Maximum Tender Amount") of the outstanding 7.25% Notes due 2021, 6.50% Notes due 2019 and 9.375% Notes due 2022 (note 16A).
- On February 28, 2017, CEMEX accepted for purchase US\$475 aggregate principal amount of the tendered Notes, including all US\$385 aggregate principal amount of the 7.25% Notes due 2021 and US\$90 aggregate principal amount of the 6.50% Notes due 2019 (note 16A). CEMEX paid a premium of approximately US\$37 in connection with such Tender offer.
- On March 28, 2017, in connection with the Maceo project described in note 24A, Central de Mezclas, S.A. ("Central de Mezclas"), an indirect subsidiary of CEMEX, was notified of Corantioquia's decision regarding the appeal for reversal against the decision of the authority that denied the request to modify the environmental license of the Maceo project to 950,000 tons per year, due to the overlap of the project with an Integrally Managed District. Corantioquia's decision was to confirm the previous decision, and consequently to deny the appeal for reversal despite the appeal filed by Central de Mezclas. As a result of this decision, CEMEX is currently working on the zoning and compatibilization of the Maceo project with the integrally managed district, as well as analyzing alternatives for partial subtraction of the Integrally Managed District in order to avoid future discussions regarding of the feasibility of achieving the expansion of the proposed activity in the project, above 950,000 tons of production. Once these alternatives are implemented, CEMEX will reconsider submitting a new request for modification of the environmental license to expand its production to the initially planned 950,000 tons. In the meantime, CEMEX will limit its activities to those that are currently authorized by the current environmental license and mining title. During the first quarter of 2017, investigations and legal proceedings are ongoing and as of March 31, 2017, no further adjustments have been made (note 24A).
- On March 30, 2017, stockholders at the annual ordinary shareholders' meeting approved, among other resolutions, a capitalization of retained earnings consisting in the issuance of 1,124,863,326 Series A shares and 562,431,663 Series B shares, equivalent to approximately 562.4 million CPOs, to be allocated to shareholders on a pro rata basis pursuant to such approval. These shares will become part of CEMEX, S.A.B. de C.V.'s outstanding capital stock on May 8, 2017.
- On April 5, 2017, in connection with the previously announced sale of our operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, agreed with Duna-Dráva Cement Kft. in August 2015 (note 4A), CEMEX announced that the European Commission (the "EC") issued a decision that

### Subsequent events — continued

ultimately does not allow Duna-Dráva Cement Kft to purchase the aforementioned operations. As one of the closing conditions under the corresponding sale purchase agreement was to receive the necessary clearance from the EC and said clearance was received, the transaction will not close and CEMEX will maintain its operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, and continue to operate them, which mainly consist of three cement plants with aggregate annual production capacity of approximately 2.4 million tons of cement, two aggregates quarries and seven ready-mix plants. For the years ended December 31, 2016, 2015 and 2014, the operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, included in CEMEX's statements of operations are presented in the single line item "Discontinued Operations." Considering the recent developments related to this transaction mentioned above and for purposes of the consolidated income statements, beginning in the second quarter of 2017, CEMEX will reclassify the income statements of its operations in Croatia, including assets in Bosnia and Herzegovina, Montenegro and Serbia, from the single line item "Discontinued Operations" to each specific line item.

- On April 17, 2017, CEMEX announced that one of its subsidiaries in the United States signed a definitive agreement for the sale of its Pacific Northwest Materials Business consisting of aggregate, asphalt and ready-mix concrete operations in Oregon and Washington to Cadman Materials, Inc., a LehighHanson company and U.S. subsidiary of HeidelbergCement Group, for approximately US\$150. The closing of this transaction is subject to the satisfaction of certain conditions, including approval from regulators. CEMEX currently expects to finalize this divestiture during the second quarter of 2017 or soon thereafter.
- In connection with the securitization programs for the sale of accounts receivable (note 9) in the United States, France and the United Kingdom, CEMEX extended such plans in March 2017 and now they mature in March 2018. The securitization program in Mexico was settled and paid in March 2017.

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

### Subsequent events — continued

• In connection with earnings (loss) per share (note 22) and the capitalization of retained earnings mentioned above, on a pro forma basis giving effect to the issuance of new shares, CEMEX's earnings (loss) per share in 2016, 2015 and 2014 would have been as follows:

	2016	2015	2014
Denominator (thousands of shares)			
Weighted average number of shares outstanding	42,211,409	41,491,672	40,093,504
Capitalization of retained earnings	1,687,295	1,687,295	1,687,295
Effect of dilutive instruments — mandatorily convertible securities (note 16B)	708,153	708,153	708,153
Weighted average number of shares — basic	44,606,857	43,887,120	42,488,952
21) Effect of potentially dilutive instruments — optionally	226,972	171,747	293,657
convertible securities (note 16B)	3,834,458	5,065,605	6,449,741
Weighted average number of shares — diluted	48,668,287	49,124,472	49,232,350
Numerator			
Net income (loss) from continuing operations	Ps 14,183	854	(5,770)
Less: non-controlling interest net income	1,174	932	1,103
Controlling interest net income (loss) from continuing			
operations	13,009	(78)	(6,873)
Plus: after tax interest expense on mandatorily convertible			
securities	119	144	164
Controlling interest net income (loss) from continuing operations			
— for basic earnings per share calculations	13,128	66	(6,709)
Plus: after tax interest expense on optionally convertible securities	1,079	1,288	1,424
Controlling interest net income (loss) from continuing operations — for diluted earnings per share calculations	Ps 14,207	1,354	(5,285)
Income from discontinued operations	Ps 1,024	1,279	90
•			
Basic Earnings (Loss) Per Share Controlling Interest Basic Earnings (Loss) Per Share	Ps 0.32	0.03	(0.16)
operations	0.29	_	(0.16)
Controlling Interest Basic Earnings (Loss) Per Share from discontinued operations	0.03	0.03	
Controlling Interest Diluted Earnings (Loss) Per Share			
Controlling Interest Diluted Earnings (Loss) Per Share Controlling Interest Diluted Earnings (Loss) Per Share from	Ps 0.32	0.03	(0.16)
continuing operations	0.29	_	(0.16)
discontinued operations	0.03	0.03	

### Notes to the Consolidated Financial Statements As of December 31, 2016, 2015 and 2014 (Millions of Mexican pesos)

#### 27) MAIN SUBSIDIARIES

The main subsidiaries as of December 31, 2016 and 2015 were as follows:

		% Interest	
Subsidiary	Country	2016	2015
CEMEX México, S. A. de C.V. <sup>1</sup>	Mexico	100.0	100.0
CEMEX España, S.A. <sup>2</sup>	Spain	99.9	99.9
CEMEX, Inc.	United States of America	100.0	100.0
CEMEX Latam Holdings, S.A. <sup>3</sup>	Spain	74.3	74.4
CEMEX (Costa Rica), S.A.	Costa Rica	99.1	99.1
CEMEX Nicaragua, S.A	Nicaragua	100.0	100.0
Assiut Cement Company	Egypt	95.8	95.8
CEMEX Colombia, S.A.4	Colombia	99.9	99.7
Cemento Bayano, S.A. <sup>5</sup>	Panama	100.0	99.9
CEMEX Dominicana, S.A	Dominican Republic	100.0	100.0
CEMEX de Puerto Rico Inc.	Puerto Rico	100.0	100.0
CEMEX France Gestion (S.A.S.)	France	100.0	100.0
CEMEX Holdings Philippines <sup>6</sup>	Philippines	55.0	_
Solid Cement Corporation <sup>6</sup>	Philippines	100.0	100.0
APO Cement Corporation <sup>6</sup>	Philippines	100.0	100.0
CEMEX Holdings (Malaysia) Sdn Bhd	Malaysia	100.0	100.0
CEMEX U.K	United Kingdom	100.0	100.0
CEMEX Deutschland, AG	Germany	100.0	100.0
CEMEX Czech Republic, s.r.o.	Czech Republic	100.0	100.0
CEMEX Polska sp. Z.o.o.	Poland	100.0	100.0
CEMEX Holdings (Israel) Ltd.	Israel	100.0	100.0
CEMEX SIA	Latvia	100.0	100.0
CEMEX Topmix LLC, CEMEX Supermix LLC and CEMEX Falcon			
LLC <sup>7</sup>	United Arab Emirates	100.0	100.0
CEMEX AS	Norway	100.0	100.0
Cimentos Vencemos do Amazonas, Ltda	Brazil	100.0	100.0
Readymix Argentina, S.A.	Argentina	100.0	100.0
CEMEX Jamaica	Jamaica	100.0	100.0
Neoris N.V.8	The Netherlands	99.8	99.8
CEMEX International Trading, LLC <sup>9</sup>	United States of America	100.0	100.0
Transenergy, Inc. <sup>10</sup>	United States of America	100.0	100.0

- 1 CEMEX México, S.A. de C.V. is the indirect holding company of CEMEX España, S.A. and subsidiaries.
- 2 CEMEX España, S.A is the indirect holding company of most of CEMEX's international operations.
- 3 The interest reported includes own shares held at CLH's treasury.
- 4 Represents our 99.7% and 98.9% interest in ordinary and preferred shares, respectively.
- 5 Includes a 0.515% interest held on Cemento Bayano's treasury.
- **6** Represents CEMEX Holdings Philippines Inc. direct and indirect interest.
- 7 CEMEX owns a 49% equity interest in each of these entities and holds the remaining 51% of the economic benefits, through agreements with other shareholders.
- 8 Neoris N.V. is the holding company of the entities involved in the sale of information technology solutions and services.

### Main subsidiaries — continued

- 9 CEMEX International Trading, LLC is involved in the international trading of CEMEX's products.
- 10 Formerly named Gulf Coast Portland Cement Co., it is engaged in the procurement and trading of fuels, such as coal and petroleum coke, used in certain operations of CEMEX's.

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### The Board of Directors and Stockholders

CEMEX, S.A.B. de C.V.:

We have audited the accompanying consolidated balance sheets of CEMEX, S.A.B. de C.V. and subsidiaries (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of CEMEX, S.A.B. de C.V. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with International Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), CEMEX, S.A.B de C.V. and subsidiaries' internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated April 28, 2017 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

KPMG Cardenas Dosal, S.C.

/s/ Luis Gabriel Ortiz Esqueda Monterrey, N.L. Mexico April 28, 2017

#### INTERNAL CONTROL REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### The Board of Directors and Stockholders

CEMEX, S.A.B. de C.V.:

We have audited CEMEX S.A.B. de C.V. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). CEMEX S.A.B de C.V. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness related to the Company's risk assessment and monitoring of significant unusual transactions has been identified and included in Management's Annual Report on Internal Control Over Financial Reporting as of December 31, 2016. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 2016. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2016 consolidated financial statements, and this report does not affect our report dated April 28, 2017, which expressed an unqualified opinion on those consolidated financial statements.

In our opinion, because of the effect of the aforementioned material weakness on the achievement of the objectives of the control criteria, CEMEX S.A.B. de C.V. and subsidiaries has not maintained effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)".

We do not express an opinion or any other form of assurance on management's statements referring to corrective actions taken after December 31, 2016, relative to the aforementioned material weakness in internal control over financial reporting.

KPMG Cardenas Dosal, S.C.

/s/ Luis Gabriel Ortiz Esqueda Monterrey, N.L. Mexico April 28, 2017