Consolidated Financial Statements

December 31, 2019, 2018 and 2017

(With Independent Auditor's Report Thereon)

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CEMEX, S.A.B. de C.V. and Subsidiaries:

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Consolidated Income Statements (Millions of U.S. dollars, except for earnings per share)

			Years ende		
	Notes		2019	2018 *	2017 *
Revenues	2	\$	13,130	13,531	12,926
Cost of sales	-	φ	(8,825)	(8,849)	(8,365)
Cost of sales	2.10	_	(8,823)	(8,849)	(8,303)
Gross profit	••••••		4,305	4,682	4,561
Operating expenses	2.16, 5	-	(2,972)	(2,979)	(2,826)
Operating earnings before other expenses, net	2.1		1,333	1,703	1,735
Other expenses, net	6	_	(347)	(296)	(205)
Operating earnings	•••••		986	1,407	1,530
Financial expense	7.1, 16		(711)	(722)	(1,086)
Financial income and other items, net	7.2		(71)	(2)	184
Share of profit of equity accounted investees	13.1	_	49	34	33
Earnings before income tax			253	717	661
Income tax	19	_	(162)	(224)	(16)
Net income from continuing operations	••••••		91	493	645
Discontinued operations	4.2	_	88	77	222
CONSOLIDATED NET INCOME	•••••		179	570	867
Non-controlling interest net income		_	36	42	75
CONTROLLING INTEREST NET INCOME	••••••	\$	143	528	792
Basic earnings per share	22	\$	0.0031	0.0114	0.0174
Basic earnings per share from continuing operations		\$	0.0012	0.0098	0.0125
Diluted earnings per share	22	\$	0.0031	0.0114	0.0174
Diluted earnings per share from continuing operations		\$	0.0012	0.0098	0.0125

The accompanying notes are part of these consolidated financial statements.

^{*} The Company's comparative financial statements were re-presented, see note 2.1 for a description of main changes.

Consolidated Statements of Comprehensive Income (Loss) (Millions of U.S. dollars)

		Years ended December 31,					
	Notes	<u> </u>	2019	2018 *	2017 *		
CONSOLIDATED NET INCOME		\$	179	570	867		
Items that will not be reclassified subsequently to the income statement							
Net actuarial gains (losses) from remeasurements of defined benefit							
pension plans	18		(210)	176	=		
Effects from strategic equity investments	13.2		(8)	(3)	(10)		
Income tax recognized directly in other comprehensive income	19		29	(31)			
			(189)	142	(10)		
Items that are or may be reclassified subsequently to the income statement							
Derivative financial instruments designated as cash flow hedges	16.4		(137)	(119)	15		
Currency translation results of foreign subsidiaries	20.2		60	(91)	(14)		
Income tax recognized directly in other comprehensive income	19		49	43	13		
			(28)	(167)	14		
Total items of other comprehensive income, net			(217)	(25)	4		
TOTAL COMPREHENSIVE INCOME (LOSS)			(38)	545	871		
Non-controlling interest comprehensive income (loss)			(69)	1	12		
CONTROLLING INTEREST COMPREHENSIVE INCOME		\$	31	544	859		

The accompanying notes are part of these consolidated financial statements.

^{*} The Company's comparative financial statements were re-presented, see note 2.1 for a description of main changes.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Consolidated Statements of Financial Position (Millions of U.S. dollars)

			December	January 1,	
	Notes		2019	2018 *	2018 *
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	8	\$	788	309	699
Trade accounts receivable	9		1,521	1,488	1,557
Other accounts receivable	10		325	312	252
Inventories	11		989	1,081	959
Assets held for sale	12.1		839	107	70
Other current assets	12.2	-	117	124	99
Total current assets		-	4,579	3,421	3,636
NON-CURRENT ASSETS					
Equity accounted investees	13.1		481	484	436
Other investments and non-current accounts receivable	13.2		236	268	293
Property, machinery and equipment, net and assets for the right-of-use, net	14		11,850	12,454	12,782
Goodwill and intangible assets, net	15		11,590	11,936	11,954
Deferred income tax assets	19.2	l _	627	618	783
Total non-current assets		1 _	24,784	25,760	26,248
TOTAL ASSETS		\$_	29,363	29,181	29,884
LIABILITIES AND STOCKHOLDERS' EQUIT	Y				
CURRENT LIABILITIES					
Short-term debt		\$	62	45	864
Other financial obligations			1,381	855	1,176
Trade payables			2,526	2,537	2,363
Income tax payable			219	212	261
Other current liabilities	17		1,184	1,130	1,242
Liabilities directly related to assets held for sale	12.1	-	37	16	
Total current liabilities	••	-	5,409	4,795	5,906
NON-CURRENT LIABILITIES					
Long-term debt	16.1		9,303	9,266	9,009
Other financial obligations	16.2		1,044	1,592	1,577
Employee benefits	18		1,138	967	1,204
Deferred income tax liabilities	19.2		720	748	795
Other non-current liabilities	17	-	925	760	795
Total non-current liabilities			13,130	13,333	13,380
TOTAL LIABILITIES	••	-	18,539	18,128	19,286
STOCKHOLDERS' EQUITY					
Controlling interest:					
Common stock and additional paid-in capital	20.1		10,424	10,331	10,297
Other equity reserves	20.2		(2,724)	(2,472)	(2,385)
Retained earnings	20.3	Ι.	1,621	1,622	1,115
Total controlling interest			9,321	9,481	9,027
Non-controlling interest and perpetual debentures			1,503	1,572	1,571
TOTAL STOCKHOLDERS' EQUITY	••		10,824	11,053	10,598
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		\$	29,363	29,181	29,884

The accompanying notes are part of these consolidated financial statements.

^{*} The Company's comparative financial statements were re-presented, see note 2.1 for a description of main changes.

Consolidated Statements of Cash Flows

(Millions of U.S. dollars)

(Millions of U.S. dollars)			Years en	ded December 3	1.
	Notes		2019	2018 *	2017 *
OPERATING ACTIVITIES					
Consolidated net income		\$	179	570	867
Discontinued operations		_	88	77	222
Net income from continuing operations		\$	91	493	645
Non-cash items:					
Depreciation and amortization of assets	5		1,045	982	963
Impairment losses	6		64	62	151
Share of profit of equity accounted investees	13.1		(49)	(34)	(33)
Results on sale of subsidiaries, other disposal groups and others			(49)	(13)	(216)
Financial expense, financial income and other items, net			782	724	902
Income taxes	19		162	224	16
Changes in working capital, excluding income taxes			98	(55)	431
Net cash flow provided by operating activities from continuing operations before financial expense, coupons on perpetual debentures and income taxes		_	2,144	2,383	2,859
Interest and coupons on perpetual debentures paid	20.4		(694)	(741)	(899)
Income taxes paid			(168)	(207)	(246)
Net cash flow provided by operating activities from continuing operations			1,282	1,435	1,714
Net cash flow provided by operating activities from discontinued operations			71	132	131
Net cash flows provided by operating activities		_	1,353	1,567	1,845
INVESTING ACTIVITIES			2,000	2,207	2,010
Property, machinery and equipment, net	14		(651)	(601)	(567)
Acquisition and disposal of subsidiaries and other disposal groups, net			469	(26)	1,202
Intangible assets	· · · · · ·		(116)	(187)	(86
Non-current assets and others, net			5	(107)	4
Net cash flows used in investing activities		_	(293)	(815)	553
FINANCING ACTIVITIES		_	(2)3)	(012)	
Dividends paid			(150)		
Derivative financial instruments			(56)	20	- 16
			(30) 47	(420)	(2,056
Proceeds from (repayment) of debt, net	16.1		(233)	(578)	(190)
			` ′	` ′	(190)
Share repurchase program.	20.1		(50)	(75)	25
Securitization of trade receivables			(6)	32	(195
Non-current liabilities, net			(96)	(142)	(185)
Net cash flows used in financing activities		_	(544)	(1,163)	(2,390)
Increase (decrease) in cash and cash equivalents from continuing operations			445	(543)	(123)
Increase in cash and cash equivalents from discontinued operations			71	132	131
Foreign currency translation effect on cash			(37)	21	130
Cash and cash equivalents at beginning of period		_	309	699	561
CASH AND CASH EQUIVALENTS AT END OF PERIOD	8	\$	788	309	699
Changes in working capital, excluding income taxes:					
Trade receivables		\$	(8)	15	1
Other accounts receivable and other assets			33	(82)	47
Inventories			96	(148)	(19)
Trade payables			(41)	231	286
Other accounts payable and accrued expenses		_	18	(71)	116
Changes in working capital, excluding income taxes		\$	98	(55)	431

The accompanying notes are part of these consolidated financial statements.

^{*} The Company's comparative financial statements were re-presented, see note 2.1 for a description of main changes.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Statements of Changes in Stockholders' Equity (Millions of U.S. dollars)

	Notes		Common stock	Additional paid-in capital	Other equity reserves	Retained earnings	Total controlling interest	Non-controlling interest	Total stockholders' equity
Balance as of December 31, 2016	••	\$	318	9,038	(2,354)	933	7,935	1,559	9,494
Effects from adoption of IFRS 16 (note 2.1)			_	_	_	(104)	(104)	_	(104)
Balance as of January 1, 2017 *			318	9,038	(2,354)	829	7,831	1,559	9,390
Net income for the period			_	_	_	792	792	75	867
Other comprehensive income for the period	20.2		_	_	67	_	67	(63)	4
Total other of comprehensive income for the period			_	_	67	792	859	12	871
Capitalization of retained earnings			_	506	_	(506)	_	_	_
Effects of early conversion of convertible subordinated notes	16.2		_	393	(74)	_	319	_	319
Share-based compensation	21		_	42	1	_	43	_	43
Coupons paid on perpetual debentures			_	-	(25)	_	(25)	_	(25)
Balance as of December 31, 2017 *			318	9,979	(2,385)	1,115	9,027	1,571	10,598
Effects from adoption of IFRS 9 (note 2.1)		_	_	_	_	(21)	(21)	_	(21)
Balance as of January 1, 2018 *	••		318	9,979	(2,385)	1,094	9,006	1,571	10,577
Net income for the period			_	_	_	528	528	42	570
Other comprehensive income for the period	20.2	_	_	_	16	_	16	(41)	(25)
Total other of comprehensive income for the period			_	_	16	528	544	1	545
Own shares purchased under share repurchase program	20.1		_	_	(75)	_	(75)	_	(75)
Share-based compensation			_	34	1	_	35	_	35
Coupons paid on perpetual debentures			_	_	(29)	-	(29)	_	(29)
Balance as of December 31, 2018 *			318	10,013	(2,472)	1,622	9,481	1,572	11,053
Effects from adoption of IFRIC 23 (note 2.1)		_	_	_	_	6	6	_	6
Balance as of January 1, 2019			318	10,013	(2,472)	1,628	9,487	1,572	11,059
Net income for the period			_	_	_	143	143	36	179
Other comprehensive income for the period	20.2	_			(112)		(112)	(105)	(217)
Total other of comprehensive income for the period			_	_	(112)	143	31	(69)	(38)
Dividends			_	_	_	(150)	(150)	_	(150)
Effects of mandatorily convertible securities			_	151	(151)	_	_	_	_
Own shares purchased under share repurchase program			_	(75)	25	_	(50)	_	(50)
Share-based compensation			_	17	15	_	32	_	32
Coupons paid on perpetual debentures			_	-	(29)	_	(29)	_	(29)
Balance as of December 31, 2019		\$	318	10,106	(2,724)	1,621	9,321	1,503	10,824

The accompanying notes are part of these consolidated financial statements.

^{*} The Company's comparative financial statements were re-presented, see note 2.1 for a description of main changes.

(Millions of U.S. dollars)

1) DESCRIPTION OF BUSINESS

CEMEX, S.A.B. de C.V., founded in 1906, is a publicly traded variable stock corporation (*sociedad anónima bursátil de capital variable*) organized under the laws of the United Mexican States, or Mexico, and is a holding company (parent) of entities whose main activities are oriented to the construction industry, through the production, marketing, sale and distribution of cement, ready-mix concrete, aggregates and other construction materials and services. In addition, CEMEX, S.A.B. de C.V. carries out substantially all businesses and operational activities in Mexico.

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 5, 2020 considering the favorable recommendation of its Audit Committee. These financial statements will be submitted for authorization to the Annual General Ordinary Shareholders' Meeting of the Parent Company on March 26, 2020.

2) SIGNIFICANT ACCOUNTING POLICIES

2.1) BASIS OF PRESENTATION AND DISCLOSURE

The consolidated financial statements as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017, 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

Beginning March 31, 2019 and for all subsequent periods, as permitted by International Accounting Standard 21, *The Effects of Changes in Foreign Exchange Rates* ("IAS 21") under IFRS and with the authorization of CEMEX, S.A.B. de C.V.'s Board of Directors, considering the previous favorable opinion of its Audit Committee, CEMEX changed its presentation currency from the Mexican peso to the dollar of the United States of America ("U.S. dollar") considering the following factors:

- For a consolidated group that comprises operations with a number of functional currencies, it is a decision of each entity to select its presentation currency under IAS 21, which may be the currency that management uses when controlling and monitoring the performance and financial position of the group. In the case of CEMEX, management uses the U.S. dollar for these purposes;
- The Company believes that presenting its consolidated financial information using the U.S. dollar will improve and facilitate the analysis to a broad range of users (rating agencies, analysts, investors and lenders, among others) of the Company's consolidated financial statements; and
- The use of the U.S. dollar as presentation currency will also improve the comparison of CEMEX's consolidated financial statements with those of other global entities.

The consolidated financial statements, including comparative amounts and the accompanying notes to the consolidated financial statements, are presented as if the new presentation currency had always been CEMEX's presentation currency. All currency translation adjustments have been set to zero as of January 1, 2010, which was the date of CEMEX's transition to IFRS. Translation adjustments and cumulative translation adjustments recognized in other comprehensive income have been presented as if CEMEX had used U.S. dollars as the presentation currency from that date. Comparative financial statements and their related notes were re-presented for the change in presentation currency by applying the methodology set out in IAS 21, using the closing exchange rates for the consolidated statements of financial position and the closing exchange rates of each month within the respective periods for consolidated income statements, consolidated statements of comprehensive income and consolidated statements of cash flows. Historic equity transactions were translated at the foreign exchange rate on the date of the transactions and were subsequently carried at historical value. The exchange rates used in translation were as described in note 2.4. In addition, resulting from this change in presentation currency and in compliance with IAS 1, *Presentation of Financial Statements*, CEMEX includes a third statement of financial position as of January 1, 2018, which incorporates the effects for the adoption of IFRS 16, *Leases* ("IFRS 16") described below.

When reference is made to U.S. dollars or "\$" it means dollars of the United States of America ("United States"). The amounts in the financial statements and the accompanying notes are stated in millions, except when reference are made to earnings per share and/or prices per share. When reference is made to "Ps" or "pesos", it means Mexican pesos. When reference is made to "€" or "euros," it means the currency in circulation in a significant number of European Union ("EU") countries. When reference is made to "£" or "pounds", it means British pounds sterling. 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 dollars or pesos, as applicable, represent those dollar or peso amounts or could be converted into dollar or peso at the rate indicated.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Presentation currency and definition of terms - continued

Amounts disclosed in the notes in connection with outstanding tax and/or legal proceedings (notes 19.4 and 24), which are originated in jurisdictions where currencies are different from 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.

Discontinued operations (note 4.2)

Considering the disposal of entire reportable operating segments as well as the sale of significant businesses, CEMEX's income statements present in the single line item of "Discontinued operations," the results of: a) the assets held for sale in the United Kingdom for the years 2019, 2018 and 2017; b) the assets held for sale in the United States for the years 2019, 2018 and 2017; c) the white cement business held for sale in Spain for the years 2019, 2018 and 2017, d) the French assets sold for the period from January 1 to June 28, 2019 and for the years ended 2018 and 2017, e) the German assets sold for the period from January 1 to May 31, 2019 and for the years 2018 and 2017, f) the Baltic and Nordic businesses sold for the period from January 1 to March 29, 2019 and for the years 2018 and 2017, g) the operating segment in Brazil sold for the period from January 1 to September 27, 2018 and for the year 2017, h) CEMEX's Pacific Northwest Materials Business operations in the United States sold on January 31, 2017 for the one-month ended January 31, 2017.

Income statements

CEMEX includes the line item titled "Operating earnings before other expenses, net" considering that it is a relevant operating measure for CEMEX's management. The line item "Other expenses, net" consists primarily of revenues and expenses not directly related to CEMEX's main activities, including impairment losses of long-lived assets, results on disposal of assets and restructuring costs, among others (note 6). 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.

Considering that it is an indicator of CEMEX's ability to internally fund capital expenditures and to measure its ability to service or incur debt under its financing agreements, for purposes of notes 4.4 and 16, CEMEX presents "Operating EBITDA" (operating earnings before other expenses, net, plus depreciation and amortization). This is not an indicator of CEMEX's financial performance, an alternative to cash flows, a measure of liquidity or comparable to other similarly titled measures of other companies. In addition, this indicator is used by CEMEX's management for decision-making purposes.

Statements of cash flows

The statements of cash flows exclude the following transactions that did not represent sources or uses of cash:

Financing activities:

- In 2019, 2018 and 2017, the increases in other financing obligations in connection with lease contracts negotiated during the year for \$220, \$229 and \$317, respectively (note 16.2);
- In 2019, 2018 and 2017, in connection with the CPOs issued as part of the executive share-based compensation programs (note 21), the total increases in equity for \$17 in 2019, \$34 in 2018 and \$42 in 2017;
- In 2017, in connection with the capitalization of retained earnings (note 20.1), the increases in common stock and additional paid-in capital against retained earnings for \$506;
- In 2017, in connection with the early conversion of part of the 2018 optional convertible subordinated notes (note 16.2), the decrease in debt for \$301, the net decrease in other equity reserves for \$74 and the increase in additional paid-in capital for \$393; and

Investing activities:

• In 2019, 2018 and 2017, in connection with the leases negotiated during the year, the increases in assets for the right-of-use related to lease contracts for \$222, \$287 and \$327, respectively (note 14.2).

Newly issued IFRS adopted in the reported periods

IFRS 16 (notes 2.6, 14 and 16.2)

Beginning January 1, 2019, IFRS 16 superseded all existing guidance related to lease accounting including IAS 17, *Leases* and introduced a single lessee accounting model that requires a lessee to recognize, for all leases, allowing exemptions in the case of leases with a term of less than 12 months or when the underlying asset is of low value, assets for the right-of-use of the underlying asset against a corresponding financial liability, representing the net present value of estimated lease payments under the contract. Under this model, the lessee recognizes in the income statement depreciation of the asset for the right-of-use and interest on the lease liability. After concluding the inventory and measurement of its leases, CEMEX adopted IFRS 16 using the full retrospective approach by means of which it determined an opening cumulative effect in its statement of financial position as of January 1, 2017, that is at the beginning of the oldest comparative period.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

The effects of IFRS 16 in the Company's opening balance sheet as of January 1, 2017 were as follows:

Condensed Consolidated Statement of Financial Position	As of January 1, 2017 Original	IFRS 16 adoption adjustments	As of January 1, 2017 Re-presented
Total current assets	\$ 4,273	_	4,273
Property, machinery and equipment, net and assets for the right-of-use, net	11,107	851	11,958
Deferred income tax assets	751	23	774
Other items of non-current assets	12,813	_	12,813
Total non-current assets	24,671	874	25,545
TOTAL ASSETS	\$ 28,944	874	29,818
Short-term other financial obligations	\$ 562	163	725
Other items of current liabilities	3,571	-	3,571
Total current liabilities	4,133	163	4,296
Long-term other financial obligations	1,253	815	2,068
Deferred income tax liabilities	946	_	946
Other items of non-current liabilities	13,118	-	13,118
Total non-current liabilities	15,317	815	16,132
TOTAL LIABILITIES	19,450	978	20,428
Retained earnings ¹	933	(104)	829
Other items of controlling interest	7,002		7,002
Total controlling interest	7,935	(104)	7,831
Non-controlling interest and perpetual debentures	1,559		1,559
TOTAL STOCKHOLDERS' EQUITY	9,494	(104)	9,390
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 28,944	874	29,818

¹ The initial effect refers to a temporary difference between the straight-line amortization expense of the right-of-use asset against the amortization of the financial liability under the effective interest rate method since origination of the contracts. This difference will reverse over the remaining term of the contracts.

Moreover, resulting from the adoption of IFRS 16, CEMEX re-presented its previously reported statement of financial position as of December 31, 2018, as follows:

Condensed Consolidated Statement of Financial Position	As	of December 31, 2018 Original	IFRS 16 adjustments	As of December 31, 2018 Re-presented
Total current assets	\$	3,421	-	3,421
Property, machinery and equipment, net and assets for the right-of-use, net		11,423	1,031	12,454
Deferred income tax assets		592	26	
Total non-current assets	-	12,688 24,703	1.057	12,688 25,760
TOTAL ASSETS	\$	28,124	1.057	29.181
Short-term other financial obligations	_	648	207	
Other items of current liabilities	_	3,940		3,940
Total current liabilities		4,588	207	4,795
Long-term other financial obligations		612	980	1,592
Deferred income tax liabilities		758	(10	748
Other items of non-current liabilities	_	10,993	_	10,993
Total non-current liabilities	_	12,363	970	13,333
TOTAL LIABILITIES		16,951	1,177	18,128
Retained earnings	-	1,742	(120	1,622
Other items of controlling interest	_	7,859		7,859
Total controlling interest		9,601	(120	9,481
Non-controlling interest and perpetual debentures	_	1,572		1,572
TOTAL STOCKHOLDERS' EQUITY	=	11,173	(120) 11,053
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	28,124	1,057	29,181

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

In addition, resulting from the adoption of IFRS 16, CEMEX re-presented its previously reported income statements and statements of cash flows for the years ended December 31, 2018 and 2017, as follows:

	For the years ended December 31,							
Condensed consolidated income statements	2018 Original	IFRS 16 effects	2018 Re-presented	2017 Original	IFRS 16 effects	2017 Re-presented		
Revenues\$	13,531	_	13,531	12,926	_	12,926		
Cost of sales	(8,883)	34	(8,849)	(8,397)	32	(8,365)		
Operating expenses	(3,003)	24	(2,979)	(2,846)	20	(2,826)		
Other expenses, net	(296)	_	(296)	(205)	_	(205)		
Financial expense	(653)	(69)	(722)	(1,023)	(63)	(1,086)		
Financial income and other items, net	35	(3)	32	219	(2)	217		
Earnings before income tax	731	(14)	717	674	(13)	661		
Income tax	(226)	2	(224)	(10)	(6)	(16)		
Net income from continuing operations	505	(12)	493	664	(19)	645		
Discontinued operations	77	=	77	222	_	222		
CONSOLIDATED NET INCOME	582	(12)	570	886	(19)	867		
Non-controlling interest net income	42	_	42	75	_	75		
CONTROLLING INTEREST NET INCOME\$	540	(12)	528	811	(19)	792		

	For the years ended December 31,						
•	2018	IFRS 16	2018	2017	IFRS 16	2017	
Condensed consolidated statements of cash flows	Original	effects	Re-presented	Original	effects	Re-presented	
OPERATING ACTIVITIES							
Net income from continuing operations\$	513	(20)	493	673	(28)	645	
Non-cash items:							
Depreciation and amortization of assets	763	219	982	787	176	963	
Other non-cash items	896	67	963	759	61	820	
Changes in working capital, excluding income taxes	(55)	-	(55)	431	_	431	
Operating cash flows from continuing operations before financial			_				
expense, coupons on perpetual debentures and income taxes	2,117	266	2,383	2,650	209	2,859	
Interest on debt and coupons on perpetual debentures paid	(672)	(69)	(741)	(836)	(63)	(899)	
Income taxes paid	(208)	1	(207)	(240)	(6)	(246)	
Operating cash flows from continuing operations	1,237	198	1,435	1,574	140	1,714	
Operating cash flows from discontinued operations	132	-	132	131	_	131	
Net cash flows provided by operating activities	1,369	198	1,567	1,705	140	1,845	
INVESTING ACTIVITIES							
Property, machinery and equipment and assets for the right-of-use, net	(601)	_	(601)	(567)	_	(567)	
Other items of investing activities	(214)	_	(214)	1,120	_	1,120	
Net cash flows provided by (used in) investing activities	(815)	-	(815)	553	_	553	
FINANCING ACTIVITIES							
Other financial obligations, net	(388)	(190)	(578)	(78)	(112)	(190)	
Other items of financing activities	(585)	_	(585)	(2,200)	_	(2,200)	
Net cash flows used in financing activities	(973)	(190)	(1,163)	(2,278)	(112)	(2,390)	
Decrease in cash and cash equivalents from continuing operations	(551)	8	(543)	(151)	28	(123)	
Increase in cash and cash equivalents from discontinued operations	132	_	132	131	_	131	
Foreign currency translation effect on cash	29	(8)	21	158	(28)	130	
Cash and cash equivalents at beginning of period	699	_	699	561	_	561	
CASH AND CASH EQUIVALENTS AT END OF PERIOD\$	309	=	309	699	_	699	

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

IFRS 9. Financial Instruments: classification and measurement ("IFRS 9")

CEMEX adopted IFRS 9 beginning January 1, 2018, which sets forth the guidance relating to the classification and measurement of financial assets and financial liabilities, the accounting for expected credit losses of financial assets and commitments to extend credits, as well as the requirements for hedge accounting; and replaced IAS 39, Financial instruments: recognition and measurement ("IAS 39"). CEMEX applied IFRS 9 prospectively. The Company's accounting policies were changed to comply with IFRS 9.

Among other aspects of presentation that had no impact on the valuation or the book value of the Company's financial assets and liabilities and therefore on the retained earnings of CEMEX, regarding the new impairment model under IFRS 9 based on expected credit losses, impairment losses for the entire lifetime of financial assets, including trade accounts receivable, are recognized on initial recognition of the asset, and in each subsequent reporting period, even in the absence of a credit event or if a loss has not yet been incurred, considering for their measurement the history of credit losses and current conditions, as well as reasonable and supportable forecasts affecting collectability. CEMEX developed an expected credit loss model applicable to its trade accounts receivable that considers the historical performance and economic environment, as well as the credit risk and expected developments for each group of customers and applied the simplified approach upon adoption of IFRS 9. The effects of the adoption of IFRS 9 on January 1, 2018 related to the expected credit loss model represented an increase in the allowance of expected credit losses of \$29 recognized against retained earnings, net of a deferred income tax asset of \$8. The balances of such allowance of expected credit losses and deferred tax assets increased from the reported amounts as of December 31, 2017 of \$109 and \$754, respectively, to \$138 and \$762 as of January 1, 2018, respectively, after the adoption effects.

Other newly issued IFRS adopted in the reported periods

Standard

In addition, there were other new standards, interpretations and standard amendments adopted as of January 1, 2019 prospectively, that did not result in any material impact on CEMEX's results or financial position, and which are explained as follows:

Main tania

Standard	Main topic
IFRIC 23, Uncertainty over income tax treatments (note 19.4)	When an entity concludes that it is not probable that a particular tax treatment is accepted, the decision should be based on which method provides better predictions of the resolution of the uncertainty.
Amendments to IAS 28, Long-term interests in associates and joint ventures	The amendment clarifies that IFRS 9, including its impairment requirements, applies to long-term interests.
Amendments to IAS 12, <i>Income taxes</i>	Clarify that an entity should recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized the transactions that generated the distributable profits.
Amendments to IAS 23, Borrowing costs	Clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalization rate on general borrowings.
$\label{eq:continuous_problem} A mendments \ to \ IFRS \ 9 - \textit{Prepayment} \\ \textit{Features with Negative Compensation} \ \dots$	Clarify that financial assets with prepayment features with negative compensation do not automatically fail to meet the 'solely payments of principal and interest' condition.
IFRS 11, Joint Arrangements – Previously held Interests in a joint operation	Clarify that a party that participates in, but does not have joint control of, a joint operation does not remeasure its previously held interest in the joint operation when it obtains joint control.
Amendments to IFRS 3, Business combinations	Clarify that when an entity obtains control of a business that is a joint operation, the entity applies the requirements for a business combination achieved in stages, including remeasuring its previously held interest in the joint operation at fair value.
Amendments to IAS 19, Employee benefits	Clarify that the past service cost (or of the gain or loss on settlement) is calculated by measuring the defined benefit liability (asset) using updated assumptions and comparing benefits offered and plan assets before and after the plan amendment (or curtailment or settlement) but ignoring the effect of the asset ceiling (that may arise when the defined benefit plan is in a surplus position).

2.2) 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 (special purpose entities), by means of which the Parent Company, directly or indirectly, 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.

Investments are accounted for by the equity method when CEMEX has significant influence which is generally presumed with a minimum equity interest of 20%. 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.

(Millions of U.S. dollars)

2.3) 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 items subject to significant estimates and assumptions by management include impairment tests of long-lived assets, 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.

2.4) 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 statement of financial position date, and the resulting foreign exchange fluctuations are recognized in earnings, except for exchange fluctuations arising from: 1) foreign currency indebtedness associated with the acquisition of foreign entities; and 2) fluctuations associated with related parties' balances denominated in foreign currency, whose 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 20.2) until the disposal of the foreign net investment, at which time, the accumulated amount is recognized 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 U.S. dollars at the closing exchange rate for statement of financial position 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 for the period as part of the foreign currency translation adjustment (note 20.2) 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.

The most significant closing exchange rates for statement of financial position accounts and the approximate average exchange rates (as determined using the closing exchange rates of each month within the period) for income statement accounts for the main functional currencies to the U.S. dollar as of December 31, 2019, 2018 and 2017, were as follows:

	2019		201	8	2017	
Currency	Closing	Average	Closing	Average	Closing	Average
Mexican peso	18.92	19.35	19.65	19.2583	19.65	18.8825
Euro	0.8917	0.8941	0.8727	0.8483	0.8331	0.8817
British Pound Sterling	0.7550	0.7831	0.7843	0.7521	0.7405	0.7707
Colombian Peso	3,277	3,300	3,250	2,972	2,984	2,958
Egyptian Pound	16.0431	16.7382	17.9559	17.8223	17.7308	17.7785
Philippine Peso	50.6350	51.5650	52.58	52.6925	49.9300	50.3817

2.5) 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 readily 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 the income statement as part of "Financial income and other items, net."

To the extent that any restriction will be lifted in less than three months from the statement of financial position reporting date, the amount of cash and cash equivalents in the statement of financial position includes restricted cash and investments, when applicable, comprised of deposits in margin accounts that guarantee certain of CEMEX's obligations, except when contracts contain provisions for net settlement, in which case, these restricted amounts of cash and cash equivalents are offset against the liabilities that CEMEX has with its counterparties. When the restriction period is greater than three months, any restricted balance of cash and investments is not considered cash equivalents and is included within short-term or long-term "Other accounts receivable," as appropriate.

(Millions of U.S. dollars)

2.6) FINANCIAL INSTRUMENTS

Classification and measurement of financial instruments

The financial assets that meet both of the following conditions and are not designated as at fair value through profit or loss; a) are held within a business model whose objective is to hold assets to collect contractual cash flows, and b) its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, are classified as "Held to collect" and measured at amortized cost. Amortized cost represents the net present value ("NPV") of the consideration receivable or payable as of the transaction date. This classification of financial assets comprises the following captions:

- Cash and cash equivalents (notes 2.5 and 8).
- Trade receivables, other current accounts receivable and other current assets (notes 9 and 10). Due to their short-term nature, CEMEX initially recognizes these assets at the original invoiced or transaction amount less expected credit losses, as explained below.
- Trade receivables sold under securitization programs, in which certain residual interest in the trade receivables sold in case of recovery failure and continued involvement in such assets is maintained, do not qualify for derecognition and are maintained in the statement of financial position (notes 9 and 16.2).
- Investments and non-current accounts receivable (note 13.2). Subsequent changes in effects from amortized cost are recognized in the income statement as part of "Financial income and other items, net".

Certain strategic investments are measured at fair value through other comprehensive income within "Other equity reserves" (note 13.2). CEMEX does not maintain financial assets "Held to collect and sell" whose business model has the objective of collecting contractual cash flows and then selling those financial assets.

The financial assets that are not classified as "Held to collect" or that do not have strategic characteristics fall into the residual category of held at fair value through the income statement as part of "Financial income and other items, net," (note 13.2).

Debt instruments and other financial obligations are classified as "Loans" and measured at amortized cost (notes 16.1 and 16.2). Interest accrued on financial instruments is recognized 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 with fair value hedge strategies with derivative financial instruments.

Derivative financial instruments are recognized as assets or liabilities in the statement of financial position at their estimated fair values, and the changes in such fair values are recognized in the income statement within "Financial income and other items, net" for the period in which they occur, except in the case of hedging instruments as described below (note 16.4).

Impairment of financial assets

Impairment losses of financial assets, including trade accounts receivable, are recognized using the expected credit loss model ("ECL") for the entire lifetime of such financial assets on initial recognition, and at each subsequent reporting period, even in the absence of a credit event or if a loss has not yet been incurred, considering for their measurement past events and current conditions, as well as reasonable and supportable forecasts affecting collectability. For purposes of the ECL model of trade accounts receivable, CEMEX segments its accounts receivable in a matrix by country, type of client or homogeneous credit risk and days past due and determines for each segment an average rate of ECL, considering actual credit loss experience over the last 24 months and analyses of future delinquency, that is applied to the balance of the accounts receivable. The average ECL rate increases in each segment of days past due until the rate is 100% for the segment of 365 days or more past due.

Costs incurred in the issuance of debt or borrowings

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 the related debt and are amortized as interest expense as part of the effective interest rate of each instrument 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 from the old instrument according to a qualitative and quantitative analysis, are recognized in the income statement as incurred.

Leases (notes 2.8, 14 and 16.2)

As mentioned in note 2.1, CEMEX adopted IFRS 16 beginning January 1, 2019 using the full retrospective approach. At the inception of a lease contract, CEMEX assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an indentified asset for a period in exchange for consideration. CEMEX uses the definition of a lease in IFRS 16 to assess whether a contract conveys the right to control the use of an identified asset.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Leases (notes 2.8, 14 and 16.2) - continued

Based on IFRS 16, leases are recognized as financial liabilities against assets for the right-of-use, measured at their commencement date as the net present value ("NPV") of the future contractual fixed payments, using the interest rate implicit in the lease or, if that rate cannot be readily determined, CEMEX's incremental borrowing rate. CEMEX determines its incremental borrowing rate by obtaining interest rates from its external financing sources and makes certain adjustments to reflect the term of the lease, the type of the asset leased and the economic environment in which the asset is leased.

CEMEX does not separate the non-lease component from the lease component included in the same contract. Lease payments included in the measurement of the lease liability comprise contractual rental fixed payments, less incentives, fixed payments of non-lease components and the value of a purchase option, to the extent that option is highly probable to be exercised or is considered a bargain purchase option. Interest incurred under the financial obligations related to lease contracts is recognized as part of the "Interest expense" line item in the income statement.

At commencement date or on modification of a contract that contains a lease component, CEMEX allocates the consideration in the contract to each lease component based on their relative stand-alone prices. CEMEX applies the recognition exception for lease terms of 12 months or less and contracts of low-value assets and recognizes the lease payment of these leases as rental expense in the income statement over the lease term. CEMEX defined the lease contracts related to office and computer equipment as low-value assets.

The lease liability is amortized using the effective interest method as payments are incurred and is remeasured when: a) there is a change in future lease payments arising from a change in an index or rate, b) if there is a change in the amount expected to be payable under a residual guarantee, c) if the Company changes its assessment of whether it will exercise a purchase, extension or termination option, or d) if there is a revised in-substance fixed lease payment. When the lease liability is remeasured, an adjustment is made to the carrying amount of the asset for the right-of-use or is recognized within "Financial income and other items, net" if such asset has been reduced to zero.

Financial instruments with components of both liabilities and equity (note 16.2)

Financial instruments that contain 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, are accounted for by each component being recognized separately in the statement of financial position 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 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 equity component represents the difference between the total proceeds received for issuing the financial instruments and the fair value of the financial liability component (note 2.14). 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 income statement.

Hedging instruments (note 16.4)

A hedging relationship is established to the extent the entity considers, based on the analysis of the overall characteristics of the hedging and hedged items, that the hedge will be highly effective in the future and the hedge relationship at inception is aligned with the entity's reported risk management strategy (note 16.5). The accounting categories of hedging instruments are: a) cash flow hedge, b) fair value hedge of an asset or forecasted transaction, and c) hedge of a net investment in a subsidiary.

In cash flow hedges, the effective portion of changes in fair value of derivative instruments are recognized in stockholders' equity within other equity reserves 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. 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 within other equity reserves (note 2.4), whose reversal to earnings would take place upon disposal of the foreign investment. During the reported periods, CEMEX did not have derivatives designated as 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.

Embedded derivative financial instruments

CEMEX reviews its 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 statement of financial position as assets or liabilities, applying the same valuation rules used for other derivative instruments.

Put options granted for the purchase of non-controlling interests

Under IFRS 9, 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 consolidated subsidiary. When the obligation should be settled in cash or through the delivery of another financial asset, an entity should recognize 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 the entity has the election to settle using its own shares. As of December 31, 2019 and 2018, CEMEX did not have written put options.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Fair value measurements (note 16.3)

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 are 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 quoted 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.- 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.

2.7) INVENTORIES (note 11)

Inventories are valued using the lower of cost or net realizable value. The cost of inventories is based on weighted average cost formula and 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. In such cases, these adjustments are recognized against the results of the period. Advances to suppliers of inventory are presented as part of other current assets.

2.8) PROPERTY, MACHINERY AND EQUIPMENT AND ASSETS FOR THE RIGHT-OF-USE (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, 2019, the average useful lives by category of fixed assets, which are reviewed at each reporting date and adjusted if appropriate, were as follows:

	Years
Administrative buildings	31
Industrial buildings	31
Machinery and equipment in plant	17
Ready-mix trucks and motor vehicles	8
Office equipment and other assets	7

Assets for the right-of-use related to leases are initially measured at cost, which comprises the initial amount of the lease liability adjusted by any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle, remove or restore the underlaying asset, less any lease incentives received. The asset for the right-of-use is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlaying asset to CEMEX by the end of the lease term or if the cost of the asset for the right-of-use reflects that CEMEX will exercise a purchase option. In that case the asset for the right-of-use would be depreciated over the useful life of the underlying asset, on the same basis as those of property, plant and equipment. In addition, assets for the right-of-use may be reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

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.

(Millions of U.S. dollars)

Property, machinery and equipment and assets for the right-of-use (note 14) - 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 of fixed assets is expensed as incurred. Advances to suppliers of fixed assets are presented as part of other long-term accounts receivable.

2.9) BUSINESS COMBINATIONS, GOODWILL AND OTHER INTANGIBLE ASSETS (notes 4.1 and 15)

Business combinations are recognized using the acquisition 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 2.10). Goodwill may be adjusted for any change 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 the income statement as incurred.

CEMEX capitalizes intangible assets acquired, as well as costs incurred in the development of intangible assets, when probable future economic benefits associated are identified and there is evidence of control over such benefits. Intangible assets are recognized at their acquisition or development cost, as applicable. 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 a straight-line basis as part of operating costs and expenses (note 5).

Startup costs are recognized in the income statement 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 probable 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 a weighted-average useful lives of 83 years, depending on the sector and the expected life of the related reserves. As of December 31, 2019, 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.

2.10) IMPAIRMENT OF LONG-LIVED ASSETS (notes 14 and 15)

Property, machinery and equipment, assets for the right-of-use, intangible assets of definite life and other investments

These assets are tested for impairment upon the occurrence of internal or external indicators of impairment, such as changes in CEMEX's operating business model or in technology that affect the asset, or expectations of lower operating results, to determine whether their carrying amounts may not be recovered. An impairment loss is recorded in the income statement 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 the asset, as generally determined by an external appraiser, 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. To obtain discounted cash flows attributable to each intangible asset, such revenue is 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 significantly sensitive to changes in such relevant 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.

(Millions of U.S. dollars)

Impairment of long-lived assets - Goodwill

Goodwill is tested for impairment when required upon the occurrence of internal or external indicators of impairment 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 latter 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. 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. 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.

The reportable segments reported by CEMEX (note 4.4), 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 reportable 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 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 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. The higher the growth rate in perpetuity applied, the higher the amount of undiscounted future cash flows by group of CGUs obtained. Moreover, the amounts of discounted estimated future cash flows are significantly sensitive to the weighted average cost of capital (discount rate) applied. The higher the discount rate applied, the lower the amount of discounted estimated future cash flows by group of CGUs obtained.

2.11) PROVISIONS

CEMEX recognizes provisions when it has a legal or constructive obligation resulting from past events, whose resolution would require cash outflows, or the delivery of other resources owned by the Company. As of December 31, 2019 and 2018, 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 24.1.

Considering guidance under IFRS, CEMEX recognizes provisions for levies imposed by governments when the obligating event or the activity that triggers the payment of the levy has occurred, as defined in the legislation.

Restructuring

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 statement of financial position's date. These provisions may include costs not associated with CEMEX's ongoing activities.

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 "Financial income and other items, 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.

(Millions of U.S. dollars)

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 statement of financial position only when present obligations exist resulting from past events that are probable 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 recognizes contingent revenues, income or assets only when their realization is virtually certain.

2.12) 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 defined benefit pension plans and other post-employment benefits, generally 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 by the employees based on actuarial estimations of the benefits' present value considering 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 statement of financial position 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 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 items of comprehensive income, net" 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 "Financial income and other items, 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.

2.13) INCOME TAXES (note 19)

The effects reflected in the income statement 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, reflecting uncertainty in income tax treatments, if any. 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 way 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.

(Millions of U.S. dollars)

Income taxes - continued

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 that CEMEX believes will not be rejected by the tax authorities based on available evidence and the likelihood of recovering them 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 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. Likewise, 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 in CEMEX's income statement for such period.

Based on IFRIC 23, *Uncertainty over income tax treatments* ("IFRIC 23"), 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. For each position is considered individually its probability, regardless of its relation to any other broader tax settlement. The 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 income statements.

The effective income tax rate is determined dividing the line item "Income Tax" by the line item "Earnings before income tax." This effective tax rate is further reconciled to CEMEX's statutory tax rate applicable in Mexico (note 19.3). A significant effect in CEMEX's effective tax rate and consequently in the 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, 2019, 2018 and 2017, the statutory tax rates in CEMEX's main operations were as follows:

Country	2019	2018	2017
Mexico	30.0%	30.0%	30.0%
United States	21.0%	21.0%	35.0%
United Kingdom	19.3%	19.3%	19.3%
France	34.4%	34.4%	34.4%
Germany	28.2%	28.2%	28.2%
Spain	25.0%	25.0%	25.0%
Philippines	30.0%	30.0%	30.0%
Colombia	33.0%	37.0%	40.0%
Egypt	22.5%	22.5%	22.5%
Others	7.8% - 35.0%	7.8% - 39.0%	7.8% - 39.0%

CEMEX's current and deferred income tax amounts included in the income statement 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 rate 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.

2.14) STOCKHOLDERS' EQUITY

Common stock and additional paid-in capital (note 20.1)

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.A.B. de C.V.'s CPOs as well as decreases associated with the restitution of retained earnings.

Other equity reserves (note 20.2)

Groups the cumulative effects of items and transactions that are, temporarily or permanently, recognized directly to stockholders' equity, and includes the comprehensive income, which reflects certain changes in stockholders' equity that do not result from investments by owners and distributions to owners.

(Millions of U.S. dollars)

Items of "Other equity reserves" included within other comprehensive income:

- 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 non-current investment class (note 2.4);
- 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 2.6);
- Changes in fair value of other investments in strategic securities (note 2.6); 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:

- 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 2.6 and 16.2). 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.

Retained earnings (note 20.3)

Retained earnings represent the cumulative net results of prior years, net of: a) dividends declared; b) capitalization of retained earnings; c) restitution of retained earnings when applicable; and d) cumulative effects from adoption of new IFRS.

Non-controlling interest and perpetual debentures (note 20.4)

This caption includes the share of non-controlling stockholders in the results and equity of consolidated subsidiaries. This caption also includes the nominal amounts 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) a unilateral option to defer interest payments or preferred dividends for indeterminate periods.

2.15) REVENUE RECOGNITION (note 3)

Revenue is recognized at a point in time or over time in the amount of the price, before tax on sales, expected to be received by CEMEX's subsidiaries for goods and services supplied as a result of their ordinary activities, as contractual performance obligations are fulfilled, and control of goods and services passes to the customer. Revenues are decreased by any trade discounts or volume rebates granted to customers. Transactions between related parties are eliminated in consolidation.

Variable consideration is recognized when it is highly probable that a significant reversal in the amount of cumulative revenue recognized for the contract will not occur and is measured using the expected value or the most likely amount method, whichever is expected to better predict the amount based on the terms and conditions of the contract.

Revenue and costs 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 ownership risks on the goods purchased, not acting as agent or broker.

When revenue is earned over time as contractual performance obligations are satisfied, which is the case of construction contracts, CEMEX apply the stage of completion method to measure revenue, which represents: a) the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs; b) the surveys of work performed; or c) the physical proportion of the contract work completed, whichever better reflects the percentage of completion under the specific circumstances. Revenue related to such construction contracts is 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.

Progress payments and advances received from customers do not reflect the work performed and are recognized as short-term or long-term advanced payments, as appropriate.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES **Notes to the Consolidated Financial Statements**

As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

2.16) 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.

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.

2.17) 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 the Parent Company and/or subsidiary's own stock (intrinsic value). The cost of equity instruments represents their estimated fair value at the date of grant and is recognized in the income statement 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.

2.18) 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") 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 for free are not recognized in the statement of financial position. 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.

During 2019, 2018 and 2017, 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.

2.19) 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, 2019, 2018 and 2017, 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.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

2.20) NEWLY ISSUED IFRS NOT YET ADOPTED

There are several amendments or new IFRS issued but not yet effective which are under analysis and the Company's management expects to adopt in their specific effective dates considering preliminarily without any significant effect in the Company's financial position or operating results, and which are summarized as follows:

Standard	Main topic	Effective date
Amendments to IFRS 10, Consolidated financial statements and IAS 28	Clarify the recognition of gains or losses in the Parent's financial statements for the sale or contribution of assets between an investor and its associate or joint venture	Has yet to be set
Amendments to IFRS 3, Business Combination	The amended definition of a business requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs. The definition of the term 'outputs' is amended to focus on goods and services provided to customers, generating investment income and other income, and it excludes returns in the form of lower costs and other economic benefits. The amendments will likely result in more acquisitions being accounted for as asset acquisitions.	January 1, 2020
Amendments to IAS 1, Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors	The amendments use a consistent definition of materiality throughout International Financial Reporting Standards and the Conceptual Framework for Financial Reporting, clarify when information is material and incorporate some of the guidance in IAS 1 about immaterial information.	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS 7 – Interest Rate Benchmark Reform	The amendments respond to the effects of Interbank Offered Rates (IBOR) reform on financial reporting and provide temporary reliefs to continue hedge accounting during the period of uncertainty before the replacement of an existing interest rate benchmark with an alternative nearly risk-free interest rate.	January 1, 2020
IFRS 17, Insurance contracts	The new Standard establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4, <i>Insurance Contracts</i> . The Standard outlines a General Model, which is modified for insurance contracts with direct participation features, described as the Variable Fee Approach. The General Model is simplified if certain criteria are met by measuring the liability for remaining coverage using the Premium Allocation Approach.	January 1, 2021

3) REVENUE AND CONSTRUCTION CONTRACTS

CEMEX's revenues are mainly originated from the sale and distribution of cement, ready-mix concrete, aggregates and other construction materials and services. CEMEX grants credit for terms ranging from 15 to 90 days depending of the type and risk of each customer. For the years ended December 31, 2019, 2018 and 2017, revenue is as follows:

	2019	2018	2017
From the sale of goods associated to CEMEX's main activities ¹	12,605	13,018	12,387
From the sale of services ²	147	159	176
From the sale of other goods and services ³	378	354	363
\$	13,130	13,531	12,926

- ${\bf 1} \quad \text{Includes in each period revenue generated under construction contracts that are presented in the table below.}$
- 2 Refers mainly to revenue generated by Neoris N.V. and its subsidiaries, 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.

Information of revenues by reportable segment and line of business for the years 2019, 2018 and 2017 is presented in note 4.4

As of December 31, 2019 and 2018, amounts receivable for progress billings to and advances received from customers of construction contracts were not significant. For 2019, 2018 and 2017, revenues and costs related to construction contracts in progress were as follows:

	Accrued 1	2019	2018	2017
Revenue from construction contracts included in consolidated revenues ²	114	79	72	89
Costs incurred in construction contracts included in consolidated cost of sales 3	(115)	(79)	(68)	(102)
Construction contracts gross operating profit (loss)\$	(1)	_	4	(13)

- 1 Revenues and costs recognized from inception of the contracts until December 31, 2019 in connection with those projects still in progress.
- 2 Revenues from construction contracts during 2019, 2018 and 2017, were mainly obtained in Mexico and Colombia.
- 3 Refers to actual costs incurred during the periods.

(Millions of U.S. dollars)

Revenue and construction contracts - continued

Under IFRS 15, some commercial practices of CEMEX, in the form of certain promotions and/or discounts and rebates offered as part of the sale transaction, result in a portion of the transaction price should be allocated to such commercial incentives as separate performance obligations, recognized as contract liabilities with customers, and deferred to the income statement during the period in which the incentive is exercised by the customer or until it expires. For the years ended December 31, 2019, 2018 and 2017 changes in the balance of contract liabilities with customers are as follows:

	_	2019	2018	2017
Opening balance of contract liabilities with customers	\$	234	237	196
Increase during the period for new transactions		1,931	1,763	3,147
Decrease during the period for exercise or expiration of incentives		(1,946)	(1,762)	(3,126)
Currency translation effects	_	6	(4)	20
Closing balance of contract liabilities with customers	\$	225	234	237

For the years 2019, 2018 and 2017, CEMEX did not identify any costs required to be capitalized as contract fulfilment assets and released over the contract life according to IFRS 15.

4) BUSINESS COMBINATIONS, DISCONTINUED OPERATIONS, SALE OF OTHER DISPOSAL GROUPS AND SELECTED FINANCIAL INFORMATION BY REPORTABLE SEGMENT AND LINE OF BUSINESS

4.1) BUSINESS COMBINATIONS

In August 2018, a subsidiary of CEMEX in the United Kingdom acquired all the shares of the ready-mix producer Procon Readymix Ltd ("Procon") for an amount in pounds sterling equivalent to \$22, considering the pound sterling to dollar exchange rate as of August 31, 2018. Based on the valuation of the fair values of the assets acquired and liabilities assumed, the net assets of Procon amounted to \$10 and goodwill was determined in the amount of \$12.

On December 5, 2016, through its subsidiary Sierra Trading ("Sierra"), CEMEX presented an offer and take-over bid, which was amended on January 9, 2017 (the "Offer"), to all shareholders of Trinidad Cement Limited ("TCL"), a company publicly listed in Trinidad and Tobago, to acquire up to 132,616,942 ordinary shares in TCL (equivalent to 30.2% of TCL's common stock). TCL's main operations are in Trinidad and Tobago, Jamaica and Barbados. TCL shares deposited in response to the Offer together with Sierra's then existing 39.5% shareholding in TCL represented 69.8% of the outstanding shares of TCL. The total consideration paid by Sierra for the TCL shares under the Offer was \$86. CEMEX started consolidating TCL on February 1, 2017. CEMEX determined a fair value of TCL's assets as of February 1, 2017 of \$531 and \$113 of debt assumed, among other effects. The purchase of TCL represented a step acquisition. As a result, the remeasurement of CEMEX's previously held ownership interest in TCL of 39.5% generated a gain of \$32 in 2017 as part of "Financial income and other items, net."

4.2) DISCONTINUED OPERATIONS

As of December 31, 2019, through an affiliate in the United Kingdom, CEMEX was in negotiations with Breedon Group plc for the sale of certain assets for an amount that could reach \$235, including \$31 of debt. The assets held for sale mainly consist of 49 ready-mix plants, 28 aggregate quarries, four depots, one cement terminal, 14 asphalt plants, four concrete products operations, as well as a portion of CEMEX's paving solutions business in the United Kingdom. After completion of the potential divestiture, CEMEX will retain significant operations in the United Kingdom related with the production and sale of cement, ready-mix concrete, aggregates, asphalt and paving solutions. As of December 31, 2019, the assets and liabilities associated with this segment under negotiation in the United Kingdom are presented in the statement of financial position within the line items of "assets held for sale," including a proportional allocation of goodwill of \$49, and "liabilities directly related to assets held for sale," respectively. Moreover, for purposes of the income statements for the years ended December 31, 2019, 2018 and 2017 the operations related to this segment are presented net of tax in the single line item "Discontinued operations." See note 26 for subsequent events in connection with this transaction.

On November 26, 2019, CEMEX announced that its U.S. affiliate Kosmos Cement Company ("Kosmos"), a partnership with a subsidiary of Buzzi Unicem S.p.A. in which CEMEX holds a 75% interest, signed a definitive agreement for the sale of certain assets to Eagle Materials Inc. for \$665. The share of proceeds to CEMEX from this transaction will be \$499. The assets being divested consist of Kosmos' cement plant in Louisville, Kentucky, as well as related assets which include seven distribution terminals and raw material reserves. 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 half of 2020. As of December 31, 2019, the assets and liabilities associated with the sale of Kosmos in the United States are presented in the statement of financial position within the line items of "assets held for sale," including a proportional allocation of goodwill of \$291, and "liabilities directly related to assets held for sale," respectively. Moreover, for purposes of the income statements for the years ended December 31, 2019, 2018 and 2017 the operations related to this segment are presented net of income tax in the single line item "Discontinued operations."

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Discontinued operations - continued

On June 28, 2019, after obtaining customary authorizations, CEMEX concluded with several counterparties the sale of its ready-mix and aggregates business in the central region of France for an aggregate price of €31.8 million (\$36.2). CEMEX's operations of these disposed assets in France for the period from January 1 to June 28, 2019 and for the years ended December 31, 2018 and 2017 are reported in the income statements, net of income tax, in the single line item "Discontinued operations," including in 2019 a gain on sale of \$17 net of a proportional allocation of goodwill related to this reporting segment of \$8.

On May 31, 2019, CEMEX concluded the sale of its aggregates and ready-mix assets in the North and North-West regions of Germany to GP Günter Papenburg AG for €87 (\$97). The assets divested in Germany consisted of four aggregates quarries and four ready-mix facilities in North Germany, and nine aggregates quarries and 14 ready-mix facilities in North-West Germany. CEMEX's operations of these disposed assets for the period from January 1 to May 31, 2019 and for the years ended December 31, 2018 and 2017 are reported in the income statements net of income tax in the single line item "Discontinued operations," including in 2019 a gain on sale of \$59.

On March 29, 2019, CEMEX closed the sale of assets in the Baltics and Nordics to the German building materials group Schwenk for a price in euro equivalent to \$387. The Baltic assets divested consisted of one cement production plant in Broceni with a production capacity of approximately 1.7 million tons, four aggregates quarries, two cement quarries, six ready-mix plants, one marine terminal and one land distribution terminal in Latvia. The assets divested also included CEMEX's 37.8% interest in Akmenes Cementas AB owner of a cement production plant in Akmene in Lithuania with a production capacity of approximately 1.8 million tons, as well as the exports business to Estonia. The Nordic assets divested consisted of three import terminals in Finland, four import terminals in Norway and four import terminals in Sweden. CEMEX's operations of these disposed assets for the period from January 1 to March 29, 2019 and for the years ended December 31, 2018 and 2017 are reported in the income statements net of income tax in the single line item "Discontinued operations," including in 2019 a gain on sale of \$66.

On March 29, 2019, CEMEX signed a binding agreement with Çimsa Çimento Sanayi Ve Ticaret A.Ş. to divest CEMEX's white cement business, except for Mexico and the U.S., for a price of \$180, including its Buñol cement plant in Spain and its white cement customer list. The transaction is pending for its conclusion the authorization of the Spanish authorities. CEMEX currently expects it could close this divestment during the first half of 2020. CEMEX's operations of these assets in Spain for the years ended December 31, 2019, 2018 and 2017 are reported in the income statements, net of income tax, in the single line item "Discontinued operations."

On September 27, 2018, CEMEX concluded the sale of the its construction materials operations in Brazil (the "Brazilian Operations") through the sale to Votorantim Cimentos N/NE S.A. of all the shares of CEMEX's Brazilian subsidiary Cimento Vencemos Do Amazonas Ltda, consisting of a fluvial cement distribution terminal located in Manaus, Amazonas province, as well as the operation license. The sale price was \$31. CEMEX determined a net gain on sale of \$12. CEMEX's Brazilian Operations for the period from January 1 to September 27, 2018 and the year ended December 31, 2017 are reported in the income statements, net of income tax, in the single line item "Discontinued operations."

On June 30, 2017, CEMEX concluded 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 subsidiary of HeidelbergCement Group, for \$150. CEMEX determined a net gain on disposal of these assets of \$22, which included a proportional allocation of goodwill of \$73. The operations of its Pacific Northwest Materials Business for the six-month period ending June 30, 2017 are reported in the income statements net of tax in the single line item "Discontinued operations."

On January 31, 2017, CEMEX concluded the sale of its Concrete Reinforced Pipe Manufacturing Business ("Concrete Pipe Business") in the United States to Quikrete Holdings, Inc. for \$500 plus a potential contingent consideration based on future performance of \$40. CEMEX determined a net gain on disposal of these assets for \$148 which included a proportional allocation of goodwill of \$260. The operations of the Concrete Pipe Business for the one-month period ending January 31, 2017 are reported in the income statements net of tax in the single line item "Discontinued operations."

As of December 31, 2019, the following table presents condensed combined information of the statement of financial position for the assets held for sale in the United Kingdom, the United States and Spain, as mentioned above:

	2019
Current assets	\$ 41
Non-current assets	751
Total assets of the disposal group	792
Current liabilities	8
Non-current liabilities	29
Total liabilities directly related to disposal group	37
Total net assets of disposal group	\$ 755

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Discontinued operations - continued

In addition, the following table presents condensed combined information of the income statements of CEMEX's discontinued operations previously mentioned in: a) the United Kingdom for the years ended December 31, 2019, 2018 and 2017; b) the United States related to Kosmos for the years ended December 31, 2019, 2018 and 2017; c) France for the period from January 1 to June 28, 2019 and for the years ended December 31, 2018 and 2017; d) Germany for the period from January 1 to May 31, 2019 and for the years ended December 31, 2018 and 2017; e) the Baltics and Nordics for the period from January 1 to March 29, 2019 and for the years ended December 31, 2018 and 2017; f) Spain for the years ended December 31, 2019, 2018 and 2017; g) Brazil for the period from January 1 to September 27, 2018 and for the year ended December 31, 2017; h) the Pacific Northwest Materials Business in the United States for the six-months period ended June 30, 2017; and i) the Concrete Pipe Business operations in the United States for the one-month period ended January 31, 2017:

	_	2019	2018	2017
Revenues	\$	572	868	873
Cost of sales and operating expenses		(534)	(792)	(811)
Other income (expenses), net		1	(1)	=
Financial expenses, net and others		=	(2)	(3)
Earnings before income tax		39	73	59
Income tax	_	(6)	(7)	(6)
Result of discontinued operations		33	66	53
Net disposal result	_	55	11	169
Net result of discontinued operations	\$	88	77	222

4.3) OTHER DISPOSAL GROUPS

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 Materials Inc. ("Eagle Materials") for \$400. Fairborn plant had an annual production capacity of approximately 730 thousand metric tons (unaudited). On February 10, 2017, CEMEX closed the divestment of these assets, and recognized in 2017 a gain on disposal for \$188 as part of "Other expenses, net" in the income statement net of an allocation of goodwill associated to CEMEX's reporting segment in the United States of \$211.

The operations of the net assets in Ohio sold to Eagle Materials did not represent discontinued operations and were consolidated by CEMEX line-by-line in the income statements for the year 2017 until their disposal. In arriving at this conclusion CEMEX evaluated the Company's ongoing operations in the Mid-West of the United States.

For the year 2017, selected combined income statement information of the net assets sold to Eagle Materials until their disposal, was as follows:

	2017
Net sales	\$ 86
Operating costs and expenses.	(71)
Operating earnings (losses) before other expenses, net	\$ 15

In addition, on April 28, 2017, CEMEX concluded the sale of its assets and activities related to the ready-mix concrete pumping business 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 an aggregate price of \$88, which included the sale of fixed assets for \$16, plus administrative and client and market development services, as well as the lease of facilities in Mexico 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 \$71, which are recognized each period as services are rendered. The agreement includes the possibility of a contingent revenue subject to results for up to \$30 linked to annual metrics beginning in the first year and up to the fifth year of the agreement. For the first two years of operation under the agreements from May 2018 to April 2019 and May 2017 to April 2018, CEMEX received an aggregate amount of \$2 related to this contingent revenue.

4.4) SELECTED FINANCIAL INFORMATION BY REPORTABLE SEGMENT AND LINE OF BUSINESS

Reportable 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 operates geographically and by business on a regional basis. For the reported periods, the Company's operations were organized in five geographical regions, each under the supervision of a regional president, as follows: 1) Mexico, 2) United States, 3) Europe, 4) South, Central America and the Caribbean ("SCA&C"), and 5) Asia, Middle East and Africa ("AMEA"). The accounting policies applied to determine the financial information by reportable segment are consistent with those described in note 2.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Selected financial information by reportable segment and line of business - continued

Considering similar regional and economic characteristics and/or materiality, certain countries have been aggregated and presented as single line items as follows: a) "Rest of Europe" refers mainly to CEMEX's operations and activities in Poland, the Czech Republic and Croatia; b) "Rest of SCA&C" refers mainly to CEMEX's operations and activities in Costa Rica, Puerto Rico, Nicaragua, Jamaica, the Caribbean, Guatemala and El Salvador, excluding the acquired operations of TCL; c) "Caribbean TCL" refers to TCL's operations mainly in Trinidad and Tobago, Jamaica, Guyana and Barbados; and d) "Rest of AMEA" refers to CEMEX's operations and activities in Egypt and the United Arab Emirates. The segment "Others" refers to: 1) cement trade maritime operations, 2) Neoris N.V., CEMEX's subsidiary involved in the business of information technology solutions, 3) the Parent Company, other corporate entities and finance subsidiaries, and 4) other minor subsidiaries with different lines of business.

Selected information of the consolidated income statements by reportable segment for the years 2019, 2018 and 2017, excluding the share of profits of equity accounted investees by reportable segment that is included in the note 13.1., was as follows:

2019	Revenues (including intragroup transactions	Less: Intragroup transactions	Revenues	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net	Other expenses, net	Financial expense	Other financing items, net
Mexico	\$ 2,897	(105)	2,792	969	159	810	(48)	(36)	(1)
United States	3,780	(103)	3,780	629	392	237	(22)	(64)	(13)
Europe	3,700		3,700	02)	372	237	(22)	(01)	(13)
United Kingdom	749	_	749	119	69	50	(2)	(11)	(17)
France	869	_	869	94	48	46	(4)	(11)	-
Germany	439	(25)	414	65	28	37	3	(3)	(4)
Spain	319	(25)	294	16	34	(18)	(8)	(2)	2
Rest of Europe	672	(14)	658	122	49	73	(1)	(5)	(4)
SCA&C		` '					` ´	` ´	
Colombia 1	504	_	504	90	29	61	(21)	(4)	(3)
Panama 1	181	(2)	179	48	17	31	(9)	(1)	_
Caribbean TCL 2	248	(8)	240	56	23	33	(2)	(6)	(4)
Dominican Republic	245	(17)	228	84	9	75	(1)	_	_
Rest of SCA&C ¹	511	(17)	494	107	20	87	(60)	(3)	(6)
AMEA									
Philippines 3	458	_	458	117	38	79	1	6	4
Israel	660	_	660	89	23	66	_	(2)	1
Rest of AMEA	286	_	286	10	22	(12)	(6)	(2)	30
Others	1,104	(579)	525	(237)	85	(322)	(167)	(567)	(56)
Continuing operations	13,922	(792)	13,130	2,378	1,045	1,333	(347)	(711)	(71)
Discontinued operations	572	_	572	89	51	38	1	_	_
Total	\$ 14,494	(792)	13,702	2,467	1,096	1,371	(346)	(711)	(71)

2018	Revenues (including intragroup transactions)	Less: Intragroup transactions	Revenues	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net	Other expenses, net	Financial expense	Other financing items, net
Mexico \$	3,302	(91)	3,211	1,217	148	1,069	(33)	(32)	(3)
United States	3,614		3,614	686	369	317	(18)	(53)	(11)
Europe									
United Kingdom	773	_	773	117	67	50	(7)	(12)	(22)
France	895	_	895	91	50	41	(47)	(13)	
Germany	429	(75)	354	37	28	9	(8)	(3)	(4)
Spain	334	(47)	287	13	33	(20)	(16)	(3)	3
Rest of Europe	733	(51)	682	113	50	63	(3)	(4)	(2)
SCA&C									
Colombia 1	524	_	524	97	29	68	6	(7)	(22)
Panama ¹	222	_	222	66	17	49	(3)	(1)	_
Caribbean TCL 2	254	(5)	249	58	19	39	(15)	(3)	(2)
Dominican Republic	218	(16)	202	61	10	51	(1)	(1)	2
Rest of SCA&C ¹	590	(20)	570	133	21	112	(7)	(3)	14
AMEA									
Philippines 3	448	_	448	93	36	57	(3)	(2)	(4)
Israel	630	_	630	87	21	66	_	(3)	(1)
Rest of AMEA	357	_	357	44	22	22	(9)	(2)	(3)
Others	1,247	(734)	513	(228)	62	(290)	(132)	(580)	53
Continuing operations	14,570	(1,039)	13,531	2,685	982	1,703	(296)	(722)	(2)
Discontinued operations	868		868	147	71	76	(1)	(2)	
Total \$	15,438	(1,039)	14,399	2,832	1,053	1,779	(297)	(724)	(2)

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

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Selected information of the income statements by reportable segment – continued

2017	Revenues (including intragroup transactions)	Less: Intragroup transactions	Revenues	Operating EBITDA	Less: Depreciation and amortization	Operating earnings before other expenses, net	Other expenses,	Financial	Other financing items, net
						<u> </u>	net	expense	
Mexico \$	3,104	(58)	3,046	1,188	147	1,041	(61)	(28)	(28)
United States	3,320	_	3,320	603	379	224	(39)	(59)	(9)
Europe									
United Kingdom	841	_	841	153	66	87	23	(13)	(21)
France	805	_	805	68	45	23	(7)	(12)	1
Germany	412	(71)	341	40	26	14	(1)	(3)	(3)
Spain	306	(52)	254	14	33	(19)	(38)	(3)	1
Rest of Europe	616	(19)	597	63	52	11	(14)	(7)	4
SCA&C									
Colombia 1	566	_	566	113	27	86	(49)	(7)	(2)
Panama ¹	266	_	266	108	19	89	(2)	(1)	_
Caribbean TCL 2	232	(3)	229	57	32	25	(10)	(12)	(2)
Dominican Republic	207	(18)	189	57	10	47	(1)	(1)	_
Rest of SCA&C ¹	605	(33)	572	144	21	123	(5)	(4)	_
AMEA									_
Philippines ³	440	_	440	82	35	47	(5)	(3)	(1)
Israel	603	_	603	84	20	64	(1)	(2)	1
Rest of AMEA	318	_	318	53	21	32	(11)	(4)	26
Others	1,090	(551)	539	(129)	30	(159)	16	(927)	217
Continuing operations	13,731	(805)	12,926	2,698	963	1,735	(205)	(1,086)	184
Discontinued operations	873	_	873	125	63	62	_	(3)	_
Total \$	14,604	(805)	13,799	2,823	1,026	1,797	(205)	(1,089)	184

- 1 CEMEX Latam Holdings, S.A. ("CLH"), a company incorporated in Spain, trades its ordinary shares on the Colombian Stock Exchange. CLH is the indirect holding company of CEMEX's operations in Colombia, Panama, Costa Rica, Guatemala, Nicaragua and El Salvador. At year end 2019 and 2018, there is a non-controlling interest in CLH of 26.83% and 26.78%, respectively, of its ordinary shares, excluding shares held in CLH's treasury (note 20.4).
- As mentioned in note 4.1, in February 2017, CEMEX's acquired a controlling interest in TCL, whose shares trade on the Trinidad and Tobago Stock Exchange. As of December 31, 2019 and 2018, there is a non-controlling interest in TCL of 30.17% of its ordinary shares in both years (note 20.4).
- 3 CEMEX's operations in the Philippines are mainly conducted through CEMEX Holdings Philippines, Inc. ("CHP"), a Philippine company whose shares trade on the Philippines Stock Exchange. As of December 31, 2019 and 2018, there is a non-controlling interest in CHP of 33.22% and 45.0% of its ordinary shares (note 20.4)

Debt by reportable segment is included in note 16.1. As of December 31, 2019 and 2018, selected statement of financial position information by reportable segment was as follows:

2019		Equity accounted investees	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets ¹
Mexico	s -		3,910	3,910	1,443	2.467	199
United States	Ψ	143	13,755	13,898	2,440	11,458	398
Europe			,,	,	_,	,	
United Kingdom		6	1,556	1,562	1,225	337	67
France		50	928	978	460	518	38
Germany		4	397	401	353	48	25
Spain		_	1,190	1,190	185	1,005	34
Rest of Europe		11	745	756	304	452	52
SCA&C							
Colombia		_	1,187	1,187	428	759	25
Panama		=	337	337	105	232	10
Caribbean TCL		_	542	542	236	306	21
Dominican Republic		=	193	193	66	127	8
Rest of SCA&C		_	381	381	164	217	18
AMEA							
Philippines		_	689	689	141	548	84
Israel		_	611	611	429	182	33
Rest of AMEA		_	423	423	131	292	13
Others	_	267	1,199	1,466	10,392	(8,926)	8
Total		481	28,043	28,524	18,502	10,022	1,033
Assets held for sale and related liabilities (note 12.1)		_	839	839	37	802	
Total consolidated	\$	481	28,882	29,363	18,539	10,824	1,033

(Millions of U.S. dollars)

Selected information of the statements of financial position by reportable segment – continued

2018		Equity accounted investees	Other segment assets	Total assets	Total liabilities	Net assets by segment	Additions to fixed assets ¹
Mexico	\$	=	3,630	3,630	1,442	2,188	168
United States		126	14,080	14,206	2,277	11,929	405
Europe							
United Kingdom		6	1,779	1,785	1,107	678	61
France		47	938	985	512	473	44
Germany		4	460	464	377	87	27
Spain		_	1,301	1,301	171	1,130	27
Rest of Europe		8	1,110	1,118	359	759	54
SCA&C							
Colombia		_	1,249	1,249	444	805	22
Panama		_	368	368	65	303	12
Caribbean TCL		=	574	574	215	359	29
Dominican Republic		_	206	206	64	142	8
Rest of SCA&C		=	457	457	176	281	14
AMEA							
Philippines		=	644	644	184	460	36
Israel		_	507	507	367	140	27
Rest of AMEA		_	438	438	145	293	15
Others		293	849	1,142	10,207	(9,065)	15
Total	_	484	28,590	29,074	18,112	10,962	964
Assets held for sale and related liabilities (note 12.1)		_	107	107	16	91	_
Total consolidated	\$	484	28,697	29,181	18,128	11,053	964

¹ In 2019 and 2018, the column "Additions to fixed assets" includes capital expenditures, which comprises acquisitions of property, machinery and equipment as well as additions of assets for the right-of-use, for combined amounts of \$1,033 and \$964, respectively (note 14).

Revenues by line of business and reportable segment for the years ended December 31, 2019, 2018 and 2017 were as follows:

2019	Cement	Concrete	Aggregates	Others	Eliminations	Revenues
Mexico\$	2,009	798	196	445	(656)	2,792
United States	1,608	2,189	917	332	(1,266)	3,780
Europe						
United Kingdom	227	310	290	246	(324)	749
France	_	720	355	4	(210)	869
Germany	192	184	62	43	(67)	414
Spain	228	86	23	18	(61)	294
Rest of Europe	396	284	88	23	(133)	658
SCA&C						
Colombia	363	176	53	51	(139)	504
Panama	141	49	15	12	(38)	179
Caribbean TCL	241	9	5	9	(24)	240
Dominican Republic	194	27	8	25	(26)	228
Rest of SCA&C	448	48	11	18	(31)	494
AMEA						
Philippines	457	_	_	2	(1)	458
Israel	_	554	166	78	(138)	660
Rest of AMEA	213	94	1	5	(27)	286
Others	_	_	_	1,107	(582)	525
Continuing operations	6,717	5,528	2,190	2,418	(3,723)	13,130
Discontinued operations	229	110	154	85	(6)	572
Total\$	6,946	5,638	2,344	2,503	(3,729)	13,702

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Information related to revenue by line of business and reportable segment - continued

2018		Cement	Concrete	Aggregates	Others	Eliminations	Revenues
Mexico	\$	2,302	898	210	642	(841)	3,211
United States		1,584	2,088	850	393	(1,301)	3,614
Europe							
United Kingdom		237	325	300	281	(370)	773
France		_	735	353	9	(202)	895
Germany		186	197	56	136	(221)	354
Spain		250	70	19	17	(69)	287
Rest of Europe		399	298	93	193	(301)	682
SCA&C							
Colombia		353	189	55	92	(165)	524
Panama		171	71	23	14	(57)	222
Caribbean TCL		245	10	5	13	(24)	249
Dominican Republic		178	27	9	24	(36)	202
Rest of SCA&C		510	63	14	24	(41)	570
AMEA							
Philippines		444	_	3	2	(1)	448
Israel		_	521	159	110	(160)	630
Rest of AMEA		257	118	1	12	(31)	357
Others		_	_	_	1,285	(772)	513
Continuing operations	_	7,116	5,610	2,150	3,247	(4,592)	13,531
Discontinued operations		420	219	236	144	(151)	868
Total	\$	7,536	5,829	2,386	3,391	(4,743)	14,399

2017	Cement	Concrete	Aggregates	Others	Eliminations	Revenues
Mexico\$	2,241	780	182	593	(750)	3,046
United States	1,353	1,832	785	384	(1,034)	3,320
Europe						
United Kingdom	189	290	301	309	(248)	841
France	_	669	319	10	(193)	805
Germany	192	192	88	96	(227)	341
Spain	292	50	14	36	(138)	254
Rest of Europe	358	267	84	36	(148)	597
SCA&C						
Colombia	373	213	65	104	(189)	566
Panama	206	91	24	10	(65)	266
Caribbean TCL	220	11	7	13	(22)	229
Dominican Republic	169	30	10	22	(42)	189
Rest of SCA&C	510	70	14	15	(37)	572
AMEA						
Philippines	430	4	8	3	(5)	440
Israel	=	498	152	114	(161)	603
Rest of AMEA	227	114	1	9	(33)	318
Others		_	_	1,090	(551)	539
Continuing operations	6,760	5,111	2,054	2,844	(3,843)	12,926
Discontinued operations	439	296	168	160	(190)	873
Total\$	7,199	5,407	2,222	3,004	(4,033)	13,799

5) OPERATING EXPENSES, DEPRECIATION AND AMORTIZATION

Consolidated operating expenses during 2019, 2018 and 2017 by function are as follows:

	2019	2018	2017
Administrative expenses ¹	\$ 1,112	1,130	1,091
Selling expenses	371	312	323
Distribution and logistics expenses	1,489	1,537	1,412
	\$ 2,972	2,979	2,826

¹ All significant R&D activities are executed by several internal areas as part of their daily activities. In 2019, 2018 and 2017, total combined expenses of these departments recognized within administrative expenses were \$38, \$39 and \$38, respectively.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Operating expenses, depreciation and amortization - continued

Depreciation and amortization recognized during 2019, 2018 and 2017 are detailed as follows:

	2019	2018	2017
Included in cost of sales	\$ 865	853	841
Included in administrative, selling and distribution and logistics expenses	180	129	122
	\$ 1,045	982	963

6) OTHER EXPENSES, NET

The detail of the line item "Other expenses, net" in 2019, 2018 and 2017 was as follows:

	2019	2018	2017
Results from the sale of assets and others, net ¹	\$ (230)	(149)	(2)
Restructuring costs ²	(48)	(72)	(45)
Impairment losses ³	(64)	(62)	(151)
Remeasurement of pension liabilities ⁴	_	(8)	_
Charitable contributions	(5)	(5)	(7)
	\$ (347)	(296)	(205)

- In 2019 and 2018, includes \$55 and \$56, respectively, in connection with property damages and natural disasters. In 2017, includes an expense of \$25 related to a penalty in connection with a market investigation in Colombia (note 24.1).
- 2 Restructuring costs mainly refer to severance payments and the definite closing of operating sites.
- 3 In 2019, 2018 and 2017, among others, includes impairment losses of fixed assets for \$64, \$23 and \$49, respectively, as well in 2018 losses in the valuation of assets held for sale of \$22 and impairment losses of goodwill in 2017 of \$98 (notes 13.2, 14 and 15).
- 4 Refers to a past services remeasurement of CEMEX's defined benefit plan in the United Kingdom determined in 2018 as a result of a recently enacted gender parity law.

7) FINANCIAL ITEMS

7.1) FINANCIAL EXPENSE

Consolidated financial expense in 2019, 2018 and 2017 includes \$77, \$74 and \$71 of interest expense from financial obligations related to lease contracts (notes 14.2 and 16.2).

7.2) FINANCIAL INCOME AND OTHER ITEMS, NET

The detail of financial income and other items, net in 2019, 2018 and 2017 was as follows:

	_	2019	2018	2017
Effects of amortized cost on assets and liabilities and others, net	\$	(59)	(59)	(59)
Foreign exchange results		(32)	10	(5)
Results from financial instruments, net (notes 13.2 and 16.4)		(1)	39	9
Financial income		21	18	18
Results in the sale of associates and remeasurement of previously held interest before				
change in control of associates (notes 4.1 and 13.1)	_	=	(10)	221
	\$	(71)	(2)	184

8) CASH AND CASH EQUIVALENTS

As of December 31, 2019 and 2018, consolidated cash and cash equivalents consisted of:

	2019	2018
Cash and bank accounts	\$ 547	258
Fixed-income securities and other cash equivalents	241	51
	\$ 788	309

Based on net settlement agreements, the balance of cash and cash equivalents excludes deposits in margin accounts that guarantee several obligations of CEMEX of \$27 in 2019 and \$21 in 2018, 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.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

9) TRADE ACCOUNTS RECEIVABLE

As of December 31, 2019 and 2018, consolidated trade accounts receivable consisted of:

	2019	2018
Trade accounts receivable\$	1,637	1,607
Allowances for expected credit losses	(116)	(119)
\$	1,521	1,488

As of December 31, 2019 and 2018, trade accounts receivable include receivables of \$682 and \$664, respectively, sold under outstanding trade receivables securitization programs and/or factoring programs with recourse, established in Mexico, the United States, France and the United Kingdom, in which CEMEX effectively surrenders control associated with the trade accounts receivable sold and there is no guarantee or obligation to reacquire the assets; nonetheless, in such programs, CEMEX retains certain residual interest in the programs and/or maintains continuing involvement with the accounts receivable. Therefore, the trade accounts receivable sold were not removed from the statement of financial position and the funded amounts to CEMEX of \$599 in 2019 and \$599 in 2018, were recognized within the line item of "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 discount granted to the acquirers of the trade accounts receivable is recorded as financial expense and amounted to \$25 in 2019, \$23 in 2018 and \$16 in 2017. CEMEX's securitization programs are usually negotiated for periods of one to two years and are usually renewed at their maturity.

Allowances for doubtful accounts were established until December 31, 2017 based on incurred loss analyses over delinquent accounts considering aging of balances, the credit history and risk profile of each customer and legal processes to recover accounts receivable. Beginning in 2018 such allowances are determined and recognized upon origination of the trade accounts receivable based on an ECL model (note 2.6).

As of December 31, 2019, the balances of trade accounts receivable and the allowance for ECL were as follows:

		Accounts		ECL average
	_	receivable	ECL allowance	rate
Mexico	\$	266	35	13.2%
United States		474	6	1.3%
Europe		432	30	6.9%
South, Central America and the Caribbean		126	25	19.8%
Asia, Middle East and Africa		301	16	5.3%
Others	_	38	4	10.5%
	\$	1,637	116	

Changes in the allowance for expected credit losses in 2019, 2018 and 2017, were as follows:

	_	2019	2018	2017
Allowances for expected credit losses at beginning of period	\$	119	109	106
Adoption effects of IFRS 9 charged to retained earnings (note 2.6)		=	29	_
Charged to selling expenses		12	8	13
Additions through business combinations		_	=	7
Deductions		(16)	(20)	(23)
Foreign currency translation effects	_	1	(7)	6
Allowances for expected credit losses at end of period	\$	116	119	109

10) OTHER ACCOUNTS RECEIVABLE

As of December 31, 2019 and 2018, consolidated other accounts receivable consisted of:

	2019	2018
Non-trade accounts receivable ¹	\$ 113	138
Interest and notes receivable	50	46
Current portion of valuation of derivative financial instruments	1	1
Loans to employees and others	14	12
Refundable taxes	147	115
	\$ 325	312

¹ Non-trade accounts receivable are mainly attributable to the sale of assets.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

11) INVENTORIES

As of December 31, 2019 and 2018, the consolidated balance of inventories was summarized as follows:

	2019	2018
Finished goods\$	320	345
Work-in-process	195	194
Raw materials	194	194
Materials and spare parts	263	303
Inventory in transit	17	45
\$	989	1,081

For the years ended December 31, 2019, 2018 and 2017, CEMEX recognized within "Cost of sales" in the income statement, inventory impairment losses of \$6, \$6 and \$1, respectively.

12) ASSETS HELD FOR SALE AND OTHER CURRENT ASSETS

12.1) ASSETS HELD FOR SALE (note 4.2)

As of December 31, 2019 and 2018, 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:

			2019		2018		
	_	Assets	Liabilities	Net assets	Assets	Liabilities	Net assets
Kosmos' assets in the United States	\$	457	14	443	\$ _	_	_
Assets in the United Kingdom		229	23	206	_	_	_
White cement assets in Spain		106	_	106	_	_	_
Assets in the central region of France		_	_	_	48	16	32
Other assets held for sale		47	_	47	59	_	59
	\$	839	37	802	\$ 107	16	91

12.2) OTHER CURRENT ASSETS

As of December 31, 2019 and 2018, other current assets are mainly comprised of advance payments to vendors. During July 2019, by means of granting a bank guarantee, CEMEX released all restricted cash balances of CEMEX Colombia, S.A. ("CEMEX Colombia") for an aggregate amount of \$12 that as of December 31, 2018 were subject to a temporary restriction on its availability due to a seizure order within a legal proceeding initiated by a supplier in connection with a commercial dispute.

13) EQUITY ACCOUNTED INVESTEES, OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

13.1) EQUITY ACCOUNTED INVESTEES

As of December 31, 2019 and 2018, the investments in common shares of associates were as follows:

	Activity	Country	%		2019	2018
Camcem, S.A. de C.V.	Cement	Mexico	40.1	\$	229	208
Concrete Supply Co. LLC	Concrete	United States	40.0		75	66
Lehigh White Cement Company	Cement	United States	36.8		64	60
Société d'Exploitation de Carrières	Aggregates	France	50.0		17	16
Société Méridionale de Carrières	Aggregates	France	33.3		15	16
Akmenes Cementas AB	Cement	Lithuania	37.8		_	27
Cemento Interoceánico, S.A.	Cement	Panama	25.0		_	8
Other companies			_	_	81	83
				\$	481	484
Out of which:						
Book value at acquisition date				\$	331	368
Changes in stockholders' equity					150	116

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Equity accounted investees - continued

On November 15, 2019, through its subsidiary Balboa Investments B.V., CEMEX sold its 25% equity interest in Cemento Interoceánico, S.A. ("Cemento Interoceánico"), customer, cement producer and competitor of the Company in Panama, to an international cement group (the "Purhaser") for a price of \$44, plus an additional consideration ("earn-out") for up to \$20 to be received in 2020 (note 17.2). As condition precedent for this acquisition of such 25% equity interest of Balboa in Cemento Interoceánico, the Purchaser required CEMEX enter with Cemento Interoceánico into a new clinker supply agreement including certain commercial conditions as well as a guaranteed installed capacity reserve of CEMEX's plant in Panama for a period of 10 years beginning on November 15, 2019. The portion of the proceeds allocated to the new clinker supply agreement was recognized as deferred revenue and will be amortized to CEMEX's income statement over the 10-year tenure of such contract with Cemento Interoceánico as the conditions agreed upon are fulfilled and revenue is earned.

On March 29, 2019, as part of the sale of the Baltic and Nordic assets to the German building materials group Schwenk described in note 4.2, CEMEX sold its 37.8% equity interest in Akmenes Cementas AB.

During 2018, a subsidiary of CEMEX in the United States invested a total of \$36 and increased the Company's ownership over the Lehigh White Cement Company investee from 24.5% to 36.8%. This deal also included an agreement in which the Company contributed all of its rights, title and interest in the white cement business in Florida to the investee and entered into an agreement in which a Company's terminal receives and packs white cement for Lehigh White Cement Company to sell and distribute in the Florida market.

During January and September 2017, by means of a public offering in the BMV and a definitive sale to two financial institutions, respectively, the Company sold 76.5 million shares of Grupo Cementos de Chihuahua, S.A.B. de C.V. ("GCC"), 23% equity interest that was held within investments in associates. CEMEX received combined proceeds of \$377 and generated a combined gain on sale in 2017 of \$187 as part of "Financial income and other items, net" in the income statement. CEMEX continues to have a 20% indirect interest in GCC through Camcem, S.A. de C.V., GCC's parent company.

As mentioned in note 4.1, on February 1, 2017, CEMEX assumed control of its former associate TCL, which was accounted until such date for under the equity method. The purchase of TCL represented a step acquisition. As a result, the remeasurement of CEMEX's previously held ownership interest in TCL of 39.5% generated a gain of \$32 in 2017 as part of "Financial income and other items, net."

Combined condensed statement of financial position information of CEMEX's associates as of December 31, 2019 and 2018 is set forth below:

	2019	2018
Current assets	\$ 982	849
Non-current assets	1,757	1,674
Total assets	 2,739	2,523
Current liabilities	 326	289
Non-current liabilities	898	879
Total liabilities	 1,224	1,168
Total net assets	\$ 1,515	1,355

Combined selected information of the statements of operations of CEMEX's associates in 2019, 2018 and 2017 is set forth below:

	_	2019	2018	2017
Sales	\$	1,600	1,449	1,433
Operating earnings		237	224	227
Income before income tax		158	110	125
Net income	_	118	86	97

The share of equity accounted investees by reportable segment in the income statements for 2019, 2018 and 2017 is detailed as follows:

	_	2019	2018	2017
Mexico	\$	23	13	15
United States		18	15	14
Europe		10	7	6
Corporate and others	_	(2)	(1)	(2)
	\$	49	34	33

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

13.2) OTHER INVESTMENTS AND NON-CURRENT ACCOUNTS RECEIVABLE

As of December 31, 2019 and 2018, consolidated other investments and non-current accounts receivable were summarized as follows:

	2019	2018
Non-current accounts receivable ¹	\$ 197	220
Investments at fair value through the income statement ²	34	22
Non-current portion of valuation of derivative financial instruments (note 16.4)	2	15
Investments in strategic equity securities ³	 3	11
	\$ 236	268

¹ Includes, among other items: a) accounts receivable from investees and joint ventures of \$32 in 2019 and \$65 in 2018, b) advances to suppliers of fixed assets of \$32 in 2019 and \$45 in 2018, c) employee prepaid compensation of \$7 in 2019 and \$6 in 2018, d) refundable taxes of \$10 in 2019 and \$13 in 2018, and e) warranty deposits of \$33 in 2019 and \$20 in 2018.

- 2 Refers to investments in private funds and investments related to employee' savings funds. In 2019 and 2018, no contributions were made to such private funds.
- 3 This line item refers mainly to a strategic investment in CPOs of Axtel, S.A.B. de C.V. ("Axtel"). This investment is recognized at fair value through other comprehensive income.

14) PROPERTY, MACHINERY AND EQUIPMENT, NET AND ASSETS FOR THE RIGHT-OF-USE, NET

As of December 31, 2019 and 2018, consolidated property, machinery and equipment, net and assets for the right-of-use, net were summarized as follows:

	2019	2018
Property, machinery and equipment, net\$	10,565	11,232
Assets for the right-of-use, net ¹	1,285	1,222
\$	11,850	12,454

¹ CEMEX adopted IFRS 16 using the full retrospective approach as of January 1, 2017. The figures as of December 31, 2018 previously reported were re-presented.

14.1) PROPERTY, MACHINERY AND EQUIPMENT, NET

As of December 31, 2019 and 2018, consolidated property, machinery and equipment, net and the changes in this line item during 2019, 2018 and 2017, were as follows:

	-	Land and mineral reserves	Building	2019 Machinery and equipment	Construction in progress ²	Total
Cost at beginning of period	\$	4,789	2,633	12,185	1,035	20,642
Accumulated depreciation and depletion	_	(958)	(1,371)	(7,081)	_	(9,410)
Net book value at beginning of period		3,831	1,262	5,104	1,035	11,232
Capital expenditures		46	28	663	=	737
Stripping costs		22	_	_	=	22
Total capital expenditures		68	28	663	_	759
Disposals ³		(38)	(8)	(50)	_	(96)
Reclassifications ⁴		(163)	(23)	(203)	(13)	(402)
Depreciation and depletion for the period		(121)	(61)	(451)	_	(633)
Impairment losses		(18)	(17)	(29)	=	(64)
Foreign currency translation effects	_	79	(133)	(364)	187	(231)
Cost at end of period		4,606	2,374	11,519	1,209	19,708
Accumulated depreciation and depletion	_	(968)	(1,326)	(6,849)	=	(9,143)
Net book value at end of period	\$	3,638	1,048	4,670	1,209	10,565

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Property, machinery and equipment, net - continued

			2018 ¹			
	Land and mineral		Machinery and	Construction		
	reserves	Building	equipment	in progress ²	Total	2017 1, 2
Cost at beginning of period\$	4,830	2,665	12,168	990	20,653	19,053
Accumulated depreciation and depletion	(857)	(1,308)	(6,900)	_	(9,065)	(8,023)
Net book value at beginning of period	3,973	1,357	5,268	990	11,588	11,030
Capital expenditures	26	29	575	_	630	615
Stripping costs	38	_	_	_	38	41
Total capital expenditures	64	29	575	_	668	656
Disposals ³	(13)	(6)	(30)	_	(49)	(94)
Reclassifications 4	(18)	(2)	(4)	30	6	(83)
Business combinations	4	_	2	=	6	331
Depreciation and depletion for the period	(184)	(102)	(371)	_	(657)	(679)
Impairment losses	(6)	(2)	(15)	_	(23)	(51)
Foreign currency translation effects	11	(12)	(321)	15	(307)	478
Cost at end of period	4,789	2,633	12,185	1,035	20,642	20,653
Accumulated depreciation and depletion	(958)	(1,371)	(7,081)	=	(9,410)	(9,065)
Net book value at end of period\$	3,831	1,262	5,104	1,035	11,232	11,588

- 1 CEMEX adopted IFRS 16 using the full retrospective approach as of January 1, 2017. The figures as of December 31, 2018 and 2017 previously reported were represented.
- 2 In 2017, CEMEX Colombia significantly concluded the construction of a cement plant in the municipality of Maceo in the Antioquia department in Colombia with an annual capacity of approximately 1.1 million tons. The plant has not initiated commercial operations. As of the reporting date, the works related to the access road to the plant remain suspended and the beginning of commercial operations is subject to the successful conclusion of several ongoing processes for the proper operation of the assets and other legal proceedings (note 24.3). As of December 31, 2019, the carrying amount of the plant, net of impairment adjustments of certain advances recognized in 2016 of \$23, is for an amount in Colombian pesos equivalent to \$278.
- 3 In 2019, includes sales of non-strategic fixed assets in the Germany, France and United Kingdom for \$32, \$12 and \$6, respectively. In 2018, includes sales of non-strategic fixed assets in the United States, Spain and Mexico for \$19, \$8 and \$6, respectively. In 2017, includes sales of non-strategic fixed assets in Mexico, the United States, and France for \$18, \$12 and \$12, respectively.
- 4 In 2019, refers to the reclassification of the assets in the United States, United Kingdom and Spain for \$134, \$182 and \$86, respectively. In 2018, refers mainly to the reclassification of the assets in Spain (note 12.1) for \$30. In 2017, refers to the construction materials' business in the Pacific Northwest of the United States for \$83 (note 4.2).

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 further adjustment in Puerto Rico in the last quarter of 2019 due to the continued adverse outlook and the overall uncertain economic conditions in such country after hurricaine "Maria" in 2017; b) change of operating model of certain assets or the transferring of installed capacity to more efficient plants; as well as c) for certain equipment, remaining idle for several periods. For the years ended December 31, 2019, 2018 and 2017, 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" (notes 2.10 and 6).

During the years ended December 31, 2019, 2018 and 2017 impairment losses of fixed assets by country are as follows:

	2019	2018	2017
Puerto Rico	\$ 52	-	_
United States	6	13	8
Colombia	3	2	_
France	1	_	3
Poland	_	5	_
Spain	_	2	24
Mexico	_	1	2
Czech Republic	_	_	8
Panama	_	_	3
Others	2	_	1
	\$ 64	23	49

(Millions of U.S. dollars)

14.2) ASSETS FOR THE RIGHT-OF-USE, NET

As of December 31, 2019 and 2018, consolidated assets for the right-of-use, net and the changes in this caption during 2019, 2018 and 2017, were as follows:

			2019					
		Machinery						
			and					
	Land	Buildings	equipment	Others	Total			
Assets for the right-of-use at beginning of period\$	384	393	1,289	7	2,073			
Accumulated depreciation	(83)	(265)	(499)	(4)	(851)			
Net book value at beginning of period	301	128	790	3	1,222			
Additions	25	52	193	4	274			
Cancellations and remeasurements	(6)	(6)	(40)	=	(52)			
Reclassifications	(5)	65	(25)	=	35			
Depreciation	(29)	(39)	(219)	(1)	(288)			
Foreign currency translation effects	(37)	38	93	_	94			
Assets for the right-of-use at end of period	366	471	1,417	11	2,265			
Accumulated depreciation	(117)	(233)	(625)	(5)	(980)			
Net book value at end of period\$	249	238	792	6	1,285			

			2018			
	Machinery and					
	Land	Buildings	equipment	Others	Total	2017
Assets for the right-of-use at beginning of period \$	373	393	1,109	6	1,881	1,487
Accumulated depreciation	(72)	(242)	(371)	(3)	(688)	(448)
Net book value at beginning of period	301	151	738	3	1,193	1,039
Additions	19	19	257	1	296	328
Cancellations and remeasurements	_	(1)	(8)	_	(9)	(1)
Depreciation	(19)	(32)	(167)	(1)	(219)	(176)
Foreign currency translation effects	_	(9)	(30)	_	(39)	3
Assets for the right-of-use at end of period	384	393	1,289	7	2,073	1,881
Accumulated depreciation	(83)	(265)	(499)	(4)	(851)	(688)
Net book value at end of period\$	301	128	790	3	1,222	1,193

For the years ended December 31, 2019, 2018 and 2017, the combined rental expense related with short-term leases, leases of low-value assets and variable lease payments was \$104, \$89 and \$96, respectively, and was recognized in cost of sales and operating expenses, as correspond. During the reported periods, CEMEX did not have any material revenue from sub-leasing activities.

15) GOODWILL AND INTANGIBLE ASSETS, NET

15.1) BALANCES AND CHANGES DURING THE PERIOD

As of December 31, 2019 and 2018, consolidated goodwill, intangible assets and deferred charges were summarized as follows:

			2019			2018		
	-	Cost	Accumulated amortization	Carrying Amount	_	Cost	Accumulated amortization	Carrying Amount
Intangible assets of indefinite useful life:	_			_		•	•	
Goodwill	\$	9,562	_	9,562	\$	9,912	_	9,912
Intangible assets of definite useful life:								
Extraction rights		1,985	(395)	1,590		1,979	(357)	1,622
Industrial property and trademarks		42	(18)	24		44	(20)	24
Customer relationships		196	(196)	_		196	(196)	_
Mining projects		48	(5)	43		42	(5)	37
Others intangible assets		1,014	(643)	371		917	(576)	341
	\$	12,847	(1,257)	11,590	\$	13,090	(1,154)	11,936

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Goodwill - continued

Changes in consolidated goodwill in 2019, 2018 and 2017, were as follows:

	2019	2018	2017
Balance at beginning of period	\$ 9,912	9,948	9,957
Business combinations	_	16	100
Reclassification to assets held for sale (notes 4.2, 4.3 and 12)	(371)	(22)	92
Impairment losses	_	_	98
Foreign currency translation effects	21	(30)	(299)
Balance at end of period	\$ 9,562	9,912	9,948

Intangible assets of definite life

Changes in intangible assets of definite life in 2019, 2018 and 2017, were as follows:

_	2019							
	Extraction rights	Industrial property and trademarks	Mining projects	Others ¹	Total			
Balance at beginning of period	1.622	24	37	341	2.024			
Additions (disposals), net ¹	(26)	(6)	5	108	81			
Reclassifications (notes 4.1, 4.2 and 12)	· -	_	_	(2)	(2)			
Amortization for the period	(8)	(1)	(1)	(114)	(124)			
Foreign currency translation effects	2	7	2	38	49			
Balance at the end of period\$	1,590	24	43	371	2,028			

		Industrial				
	Extraction	property and	Mining			
	rights	trademarks	projects	Others ¹	Total	2017
Balance at beginning of period\$	1,686	29	36	255	2,006	1,989
Additions (disposals), net ¹	(11)	(2)	6	164	157	66
Business combinations (note 4.1)	=	=	=	=	_	4
Reclassifications (notes 4.1, 4.2 and 12)	(11)	=	=	=	(11)	=
Amortization for the period	(32)	(5)	(1)	(68)	(106)	(108)
Impairment losses	(9)	=	=	=	(9)	1
Foreign currency translation effects	(1)	2	(4)	(10)	(13)	54
Balance at the end of period\$	1,622	24	37	341	2,024	2,006
-						

As of December 31, 2019 and 2018, "Others" includes the carrying amount of internal-use software of \$253 and \$227, 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 \$102 in 2019, \$133 in 2018 and \$76 in 2017.

15.2) ANALYSIS OF GOODWILL IMPAIRMENT

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 SCA&C, but this does not represent that goodwill was tested at a higher level than for operations in an individual country. During the last quarter of each year, CEMEX performs its annual goodwill impairment test.

During 2019 and 2018, CEMEX did not determine impairment losses of goodwill. Based on these analyses, during 2017, in connection with the operating segment in Spain, considering the uncertainty over the improvement indicators affecting the country's construction industry and consequently, in the expected consumption of cement, ready-mix and aggregates, partially a result of the then country's complex prevailing political environment, which had limited expenditure in infrastructure projects, as well as the uncertainty in the expected price recovery and the effects of increased competition and imports, CEMEX's management determined that the net book value of such operating segment in Spain, exceeded in \$98 the amount of the value in use. As a result, CEMEX recognized an impairment loss of goodwill for such amount as part of "Other expenses, net" in the income statement on 2017 against the related goodwill balance.

(Millions of U.S. dollars)

As of December 31, 2019 and 2018, goodwill balances allocated by operating segment were as follows:

	 2019	2018
Mexico	\$ 384	375
United States	7,469	7,760
Europe		
Spain	494	523
United Kingdom	279	324
France	221	211
Czech Republic	30	30
SCA&C		
Colombia	296	299
TCL	100	104
Others SCA&C ¹	62	62
AMEA		
Philippines	92	89
United Arab Emirates	96	96
Egypt	12	12
Others		
Other reporting segments ²	27	27
	\$ 9,562	9,912

- 1 This caption refers to the operating segments in the Dominican Republic, the Caribbean, 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.

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				Growth rates	
Groups of CGUs	2019	2018	2017	2019	2018	2017
United States	7.8%	8.5%	8.8%	2.5%	2.5%	2.5%
Spain	8.3%	8.8%	9.5%	1.6%	1.7%	1.7%
Mexico	9.0%	9.4%	10.2%	2.4%	3.0%	2.7%
Colombia	8.9%	9.5%	10.5%	3.7%	3.6%	3.7%
France	8.0%	8.4%	9.0%	1.4%	1.6%	1.8%
United Arab Emirates	8.8%	11.0%	10.4%	2.5%	2.9%	3.1%
United Kingdom	8.0%	8.4%	9.0%	1.5%	1.6%	1.7%
Range of rates in other countries	8.1% - 11.5%	8.5% - 13.3%	9.1% - 11.8%	1.6% - 6.5%	2.3% - 6.9%	2.3% - 6.8%

The discount rates used by CEMEX in its cash flows projections to determine the value in use of its operating segments generally decreased in 2019 as compared to 2018 in a range of 0.6% up to 2.6%, mainly as a result of a decrease in 2019 in the funding cost observed in the industry that changed from 7.3% in 2018 to 5.4% in 2019. The risk-free rate associated to CEMEX remained significantly flat in the level of 2.9%, while the country risk-specific rates decreased slightly in 2019 in most cases. These reductions were partially offset by a slight increase in the public comparable companies' stock volatility (beta) that changed from 1.06 in 2018 to 1.08 in 2019 and the decrease in the weighing of debt in the calculation of the discount rates that changed from 33.5% in 2018 to 31.7% in 2019. In 2018, such discount rates decreased slightly in most cases in a range of 0.3% up to 1 percentage point, except for United Arab Emirates and the Caribbean, as compared to 2017. This reduction was mainly attributable to a decrease in the public comparable companies' stock volatility (beta) and general decreases in the country specific sovereign yields in the majority of the countries where CEMEX operates and the weighing of debt in the calculation, effects that were partially offset for increases during 2018 in the funding cost observed in the industry that changed from 6.1% in 2017 to 7.3% in 2018 and the risk free rate associated with CEMEX which increased from 2.8% in 2017 to 2.9% in 2018. With respect to long-term growth rates, CEMEX uses country specific rates, which are mainly obtained from economic data released by the International Monetary Fund.

In connection with the assumptions included in the table above, CEMEX corroborates the reasonableness of its conclusions using sensitivity analyses to changes in assumptions, affecting the value in use of all groups of CGUs with an independent reasonably possible increase of 1% in the pre-tax discount rate, an independent possible decrease of 1% in the long-term growth rate, as well as using multiples of Operating EBITDA, by means of which, CEMEX determined a weighted-average multiple of Operating EBITDA to enterprise value observed in the industry and/or in recent mergers and acquisitions 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 average Operating EBITDA multiple of 11.5 times in 2019, 11.1 times in 2018 and multiple of 9.0 times in 2017.

As of December 31, 2019, 2018 and 2017, except for the operating segment in Spain in 2017, none of the other sensitivity analyses indicated a potential impairment risk in CEMEX's operating segments. CEMEX continually monitors the evolution of the group of 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 value in use would be negatively affected, it may result in a goodwill impairment loss in the future.

(Millions of U.S. dollars)

Analysis of goodwill impairment - continued

As of December 31, 2019 and 2018, goodwill allocated to its operating segment in the United States accounted in both years for 78%, 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 the operating results in recent years, the long-term nature of CEMEX's investment, the signs of recovery in the construction industry over the last 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. To improve its assurance, as mentioned above, CEMEX verified its conclusions using sensitivity analyses over Operating EBITDA multiples of recent sale transaction within the industry ocurred in such country, as well as macroeconomic information regarding gross domestic product and cement consumption over the projected periods issued by the International Monetary Fund and the U.S. Portland Cement Association, respectively.

16) FINANCIAL INSTRUMENTS

16.1) SHORT-TERM AND LONG-TERM DEBT

As of December 31, 2019 and 2018, CEMEX's consolidated debt summarized by interest rates and currencies, was as follows:

			2019		2018		
		Short-term	Long-term	Total 1, 2	Short-term	Long-term	Total 1, 2
Floating rate debt \$	s <u> </u>	59	2,997	3,056	\$ 13	3,400	3,413
Fixed rate debt		3	6,306	6,309	32	5,866	5,898
\$	\$	62	9,303	9,365	\$ 45	9,266	9,311
Effective rate ³							
Floating rate		4.3%	4.1%		7.8%	3.6%	
Fixed rate		5.5%	5.5%		4.2%	5.6%	

		201	9		2018			
Currency	Short-term	Long-term	Total	Effective rate ³	Short-term	Long-term	Total	Effective rate ³
Dollars \$	25	6,144	6,169	5.2%	\$ 30	5,837	5,867	5.8%
Euros	3	2,438	2,441	3.1%	1	2,665	2,666	2.8%
Pounds	23	433	456	3.2%	_	439	439	2.9%
Philippine pesos	3	221	224	5.2%	3	257	260	5.4%
Other currencies	8	67	75	5.6%	11	68	79	5.9%
\$	62	9,303	9,365	=	\$ 45	9,266	9,311	<u>-</u>

As of December 31, 2019 and 2018, from total debt of \$9,365 and \$9,311, respectively, 84% in 2019 and 79% in 2018 was held in the Parent Company, 11% in 2019 and 15% in 2018 was in finance subsidiaries in the Netherlands and the United States, and 5% in 2019 and 6% in 2018 was in other countries.

As of December 31, 2019 and 2018, CEMEX's consolidated debt summarized by type of instrument, was as follow:

2019	Short-term	Long-term	2018	Short-term	Long-term
Bank loans			Bank loans		_
Loans in foreign countries, 2020 to 2024. \$	1	290	Loans in foreign countries, 2019 to 2024 \$	31	328
Syndicated loans, 2021 to 2022	_	2,865	Syndicated loans, 2020 to 2022	_	3,179
	1	3,155		31	3,507
Notes payable			Notes payable		
Medium-term notes, 2023 to 2026	_	6,044	Medium-term notes, 2023 to 2026	_	5,606
Other notes payable, 2020 to 2025	6	159	Other notes payable, 2019 to 2025	7	160
	6	6,203		7	5,766
Total bank loans and notes payable	7	9,358	Total bank loans and notes payable	38	9,273
Current maturities	55	(55)	Current maturities	7	(7)
\$	62	9,303	\$	45	9,266

² As of December 31, 2019 and 2018, cumulative discounts, fees and other direct costs incurred in CEMEX's outstanding debt borrowings and the issuance of notes payable (jointly "Issuance Costs") for \$71 and \$65, respectively, are presented reducing debt balances and are amortized to financial expense over the maturity of the related debt instruments under the amortized cost method.

³ In 2019 and 2018, represents the weighted-average nominal interest rate of the related debt agreements determined at the end of each period.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Consolidated debt - continued

As of December 31, 2019 and 2018, CEMEX's bank loans included the balances under CEMEX's facilities agreement entered into with 20 financial institutions on July 19, 2017, as amended and restated on April 2, 2019 and November 4, 2019, (the "2017 Credit Agreement") as described below, for \$2,897 and \$3,208, respectively. The 2017 Credit Agreement is multi-currency and includes a committed revolving credit facility of \$1,135 in 2019 and in 2018.

Changes in consolidated debt for the years ended December 31, 2019, 2018 and 2017 were as follows:

	2019	2018	2017
Debt at beginning of year	\$ 9,311	9,873	11,401
Proceeds from new debt instruments	3,331	2,325	4,990
Debt repayments	(3,284)	(2,745)	(7,046)
Foreign currency translation and accretion effects	7	(142)	528
Debt at end of year	\$ 9,365	9,311	9,873

As of December 31, 2019 and 2018, non-current notes payable for \$6,203 and \$5,766, respectively, were detailed as follows:

						1	Repurchased	Outstanding		
	Date of			Principal		Maturity	amount	amount 2		
Description	issuance	Issuer ¹	Currency	amount	Rate	Date	\$	\$	2019	2018
November 2029 Notes ³	19/Nov/19	CEMEX, S.A.B. de C.V.	Dollar	1,000	5.45%	19/Nov/29	_	1,000	\$ 992	_
April 2026 Notes	16/Mar/16	CEMEX, S.A.B. de C.V.	Dollar	1,000	7.75%	16/Apr/26	_	1,000	996	996
March 2026 Notes ³	19/Mar/19	CEMEX, S.A.B. de C.V.	Euro	400	3.125%	19/Mar/26	_	449	446	-
July 2025 Notes	02/Apr/03	CEMEX Materials LLC	Dollar	150	7.70%	21/Jul/25	_	150	154	155
March 2025 Notes	03/Mar/15	CEMEX, S.A.B. de C.V.	Dollar	750	6.125%	05/May/25	_	750	748	748
January 2025 Notes	11/Sep/14	CEMEX, S.A.B. de C.V.	Dollar	1,100	5.70%	11/Jan/25	(29)	1,071	1,069	1,068
December 2024 Notes	05/Dec/17	CEMEX, S.A.B. de C.V.	Euro	650	2.75%	05/Dec/24	_	729	726	742
June 2024 Notes	14/Jun/16	CEMEX Finance LLC	Euro	400	4.625%	15/Jun/24	_	449	447	456
April 2024 Notes ³	01/Apr/14	CEMEX Finance LLC	Dollar	1,000	6.00%	01/Apr/24	(360)	640	621	967
March 2023 Notes ³	03/Mar/15	CEMEX, S.A.B. de C.V.	Euro	550	4.375%	05/Mar/23	(629)	_	_	629
Other notes payable									4	5_
									\$ 6,203	5,766

- 1 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 España"), CEMEX Asia B.V., CEMEX Corp., CEMEX Africa & Middle East Investments B.V., CEMEX Finance LLC, CEMEX France Gestion, (S.A.S.), CEMEX Research Group AG and CEMEX UK. CEMEX México, S.A. de C.V. and Empresas Tolteca de México, S.A. de C.V. entered into a merger agreement with CEMEX, S.A.B. de C.V. (note 27).
- 2 Presented net of all outstanding notes repurchased and held by CEMEX's subsidiaries.
- 3 In December 2019, CEMEX used a portion of the proceeds of the November 2029 Notes and increased to \$360 the repurchased amount of the April 2024 Notes. Moreover, in April 2019, CEMEX used the proceeds of the March 2026 Notes to repurchase in full the March 2023 Notes.

The maturities of consolidated long-term debt as of December 31, 2019, were as follows:

_	Bank loans	Notes payable	Total
2021\$	672	1	673
2022	1,229	=	1,229
2023	664	1	665
2024	537	1,794	2,331
2025 and thereafter	=	4,405	4,405
\$ _	3,102	6,201	9,303

As of December 31, 2019, CEMEX had the following lines of credit, of which, the only committed portion referes to the revolving credit facility under the 2017 Credit Agreement, at annual interest rates ranging between 0.75% and 8.50%, depending on the negotiated currency:

	Lines of credit	Available
Other lines of credit in foreign subsidiaries	\$ 385	286
Other lines of credit from banks	683	635
Revolving credit facility 2017 Credit Agreement	1,135	1,135
	\$ 2,203	2,056

(Millions of U.S. dollars)

Consolidated debt - continued

As a result of debt issuances, exchange offers and tender offers incurred to refinance, replace and/or repurchase existing debt instruments, as applicable, CEMEX paid issuance costs for a combined amount of \$63 in 2019, \$51 in 2018 and \$251 in 2017. Of these incurred Issuance Costs, \$24 in 2019 and \$39 in 2017, corresponding to new debt instruments or the refinancing of old debt, adjusted the carrying amount of the related debt instruments and are amortized over the remaining term of each instrument, while \$39 in 2019, \$51 in 2018 and \$212 in 2017 of such Issuance Costs, associated with the extinguished portion of the related debt, were recognized in the income statement in each year within "Financial expense". In addition, Issuance Costs pending for amortization related to extinguished debt instruments for \$1 in 2019, \$4 in 2018 and \$16 in 2017 were also recognized in the income statement of each year within Financial expense.

2017 Credit Agreement and 2014 Credit Agreement

On July 19, 2017, the Parent Company and certain subsidiaries entered into the 2017 Credit Agreement for an amount in different currencies equivalent to \$4,050 at the origination date. The proceeds were used to refinance in full the \$3,680 then outstanding under the former facilities agreements (the "2014 Credit Agreement") and other debt repayments. All tranches under the 2017 Credit Agreement have substantially the same terms and share the same guarantors and collateral package as other secured debt obligations of CEMEX. All tranches under the 2017 Credit Agreement amortize in five equal semi-annual payments beginning in July 2020, except for the commitments under the revolving credit which have a five-year maturity.

All tranches under the 2017 Credit Agreement have substantially the same terms, including a margin over LIBOR or EURIBOR, as applicable, of between 125 to 350 basis points, depending on the consolidated leverage ratio (as defined below in the Financial Covenants section) of CEMEX, as follows:

Consolidated leverage ratio	Applicable margin ¹
>= 5.00x	350 bps
< 5.00 x > = 4.50 x	300 bps
< 4.50 x > = 4.00 x	250 bps
< 4.00 x > = 3.50 x	212.5 bps
< 3.50 x > = 3.00 x	175 bps
< 3.00 x > = 2.50 x	150 bps
< 2.50x	125 bps

1 LIBOR and EURIBOR refer to the London Inter-Bank Offered Rate and the Euro Inter-Bank Offered Rate, respectively, variable rates used in international markets for debt denominated in U.S. dollars and Euros, respectively. As of December 31, 2019 and 2018, 3-Month LIBOR rate was 1,9084% and 2,8076%, respectively, meanwhile 3-Month EURIBOR rate was (0.383%) and (0.309%), respectively. The contraction "bps" means basis points. One hundred basis points equal 1%.

As part of the April 2, 2019 amendment process to the 2017 Credit Agreement, among other aspects, CEMEX extended \$1,060 of maturities by three years and made certain adjustments to its consolidated financial leverage ratio, as described below in the financial covenants section, in connection with the implementation of IFRS 16 and the neutralization of any potential effect from such adoption. In addition, CEMEX delayed the scheduled tightening of the consolidated financial leverage ratio limit by one year. Moreover, as a result of the November 4, 2019 amendments, among other aspects, CEMEX negotiated: a) an exclusive amount of up to \$500 permitted for share buy-back; b) a new allowance for disposals of non-controlling interests in subsidiaries that are no obligors under the 2017 Credit Agreement of up to \$100 per calendar year; c) authorization to implement corporate reorganizations in Mexico, Europe and TCL; and d) modifications to the calculation and limits of the consolidated coverage ratio and the consolidated leverage ratio, as described in the Financial Covenants section below.

The balance of debt under the 2017 Credit Agreement and previously under the 2014 Credit Agreement, which debtor is CEMEX, S.A.B. de C.V., was originally 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, CEMEX Asia B.V., CEMEX Corp., CEMEX Africa & Middle East Investments B.V., CEMEX Finance LLC, CEMEX France Gestion, (S.A.S.), CEMEX Research Group AG and CEMEX UK. In addition, the debt under these agreements (together with all other senior capital markets debt issued or guaranteed by CEMEX, and certain other preceding 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 (the "Collateral"); and (b) all proceeds of such Collateral. CEMEX México, S.A. de C.V. and Empresas Tolteca de México, S.A. de C.V. entered into a merger agreement with CEMEX, S.A.B. de C.V. (note 27).

During the years 2019, 2018 and 2017, under both the 2017 Credit Agreement and the 2014 Credit Agreement, CEMEX was required to: a) not exceed the aggregate amount allowed for capital expenditures of \$1,500 per year, excluding certain capital expenditures, joint venture investments and acquisitions by CHP and its subsidiaries and CLH and its subsidiaries, which had a separate aggregate limit of \$500 (or its equivalent) each; and b) not exceed the amounts allowed for permitted acquisitions and investments in joint ventures of \$400 per year. Nonetheless, such limitations did not apply if capital expenditures or acquisitions did not exceed free cash flow generation or were funded with proceeds from equity issuances or asset disposals.

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 incur additional obligations, change its line of business, enter into mergers and enter into speculative derivatives transactions.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

2017 Credit Agreement and 2014 Credit Agreement - continued

Certain covenants and restrictions, such as the capital expenditure restrictions and several negative covenants, including restrictions on CEMEX's ability to declare or pay cash dividends and distributions to shareholders, among others, shall cease to apply or become less restrictive if CEMEX so elects upon CEMEX's Leverage Ratio (as defined hereinafter) for the two most recently completed quarterly testing periods being less than or equal to 3.75 times and no default under the 2017 Credit Agreement is continuing. 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 2017 Credit Agreement. In addition, the 2017 Credit Agreement, and previously the 2014 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, 2019 and 2018, CEMEX was in compliance with such limitations and restrictions contained in the 2017 Credit Agreement. CEMEX cannot assure that in the future it will be able to comply with such restrictive covenants and limitations. 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.

Financial Covenants

The 2017 Credit Agreement requires CEMEX to comply 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 using the consolidated amounts under IFRS.

After the April 2, 2019 amendments, which modified the calculation of the Leverage Ratio and increased temporarily certain limits, CEMEX must comply with a Coverage Ratio and a Leverage Ratio for each period of four consecutive quarters. For the Coverage Ratio, the limit should equal or greater than 2.50 times from December 31, 2019 through September 30, 2022 and equal or greater than 2.75 times for each subsequent reference period. The limits for the Leverage Ratio are as follows:

Period	Leverage Ratio
For the period ending on December 31, 2019 up to and including the period ending on March 31, 2021	< = 5.25
For the period ending on June 30, 2021 up to and including the period ending on September 30, 2021	< = 5.00
For the period ending on December 31, 2021 up to and including the period ending on September 30, 2022	< = 4.75
For the period ending on December 31, 2022 up to and including the period ending on March 31, 2023	< = 4.50
For the period ending on June 30, 2023 and each subsequent reference period	< = 4.25

Leverage Ratio: After the April 2, 2019 amendments mentioned above, is calculated by dividing "Funded Debt" by pro forma Operating EBITDA for the last twelve months as of the calculation date including the adoption of IFRS 16. Funded Debt equals debt, as reported in the statement of financial position, net of cash and cash equivalents, excluding components of liability of convertible subordinated notes, plus lease liabilities, perpetual debentures and guarantees, plus or minus the fair value of derivative financial instruments, as applicable, among other adjustments for business acquisitions or disposals. Before the April 2, 2019 amendments, the calculation of Funded Debt did not include cash and cash equivalents and obligations under lease contracts.

Pro forma Operating EBITDA represents, Operating EBITDA for the last twelve months as of the calculation date, after IFRS 16 effects, 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.

Coverage ratio: is calculated by dividing pro forma Operating EBITDA by the financial expense for the last twelve months as of the calculation date, both including IFRS 16 effects. Financial expense includes coupons accrued on the perpetual debentures.

For the compliance periods ended as of December 31, 2019, 2018 and 2017, under the 2017 Credit Agreement and the 2014 Credit Agreement, as applicable, the main consolidated financial ratios were as follows:

		Consolidated financial ratios			
		2019	2018 1	2017 1	
Leverage ratio	Limit	<= 5.25	< = 4.75	<= 5.25	
	Calculation	4.17	3.84	3.85	
Coverage ratio	Limit	> = 2.50	> = 2.50	> = 2.50	
	Calculation	3.86	4.41	3.46	

¹ Refers to the compliance limits and calculations that were effective according to the outstanding conditions on such dates, before the April 2, 2019 amendments, the November 4, 2019 amendments and the adoption of IFRS 16 in the financial statements.

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.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Financial covenants - continued

CEMEX will classify all of its outstanding debt as current debt 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 2017 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) an agreement to refinance the relevant debt on a long-term basis. As a result of such classification of debt as short-term for noncompliance with the agreed upon financial ratios 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 2017 Credit Agreement. That scenario would have a material adverse effect on CEMEX's operating results, liquidity or financial position.

16.2) OTHER FINANCIAL OBLIGATIONS

As of December 31, 2019 and 2018, other financial obligations in the consolidated statement of financial position were detailed as follows:

		2019			2018	
	Short-term	Long-term	Total	Short-term	Long-term	Total
I. Leases	\$ 262	1,044	1,306	\$ 237	1,078	1,315
II. Liabilities secured with accounts receivable	599	=	599	599	=	599
III. Convertible subordinated notes due 2020	520	=	520	=	514	514
IV. Mandatorily convertible securities due 2019.	_	_		19	_	19
	\$ 1,381	1,044	2,425	\$ 855	1,592	2,447

I. Leases (notes 2.1, 2.6, 7.1, 14.2 and 23.1)

CEMEX has several operating and administrative assets under lease contracts (note 14.2). As mentioned in note 2.1, beginning January 1, 2019, CEMEX applied IFRS 16 using the full retrospective approach and re-presented the amounts of prior periods. CEMEX applies the recognition exemption for short-term leases and leases of low-value assets. Changes in the balance of lease financial liabilities during 2019, 2018 and 2017 were as follows:

	2019	2018	2017
Lease financial liability at beginning of year\$	1,315	1,309	1,054
Additions from new leases	274	296	328
Reductions from payments	(239)	(192)	(112)
Cancellations and liability remeasurements	(54)	(67)	(11)
Foreign currency translation and accretion effects	10	(31)	50
Lease financial liability at end of year	1,306	1,315	1,309

As of December 31, 2019, the maturities of lease financial liabilities are as follows:

	Total
2020	\$ 262
2021	221
2022	159
2023	115
2024 and thereafter	549
	\$ 1,306

Total cash outflows for leases in 2019, 2018 and 2017 were \$316, \$266 and \$183, respectively. Future payments associated with these contracts are presented in note 23.1.

II. Liabilities secured with accounts receivable

As mentioned in note 9, the funded amounts of sale of trade accounts receivable under securitization programs and/or factoring programs with recourse, are recognized in "Other financial obligations" in the statement of financial position.

III. Optional convertible subordinated notes due 2020

During 2015, the Parent Company issued \$521 aggregate principal amount of 3.72% optional convertible subordinated notes due in March 2020 (the "2020 Convertible Notes") as a result of exchanges or settlements of other convertible notes. The 2020 Convertible Notes, which are subordinated to all of CEMEX's liabilities and commitments, are convertible into a fixed number of the Parent Company's ADSs at any time at the holder's election and are subject to antidilution adjustments. The value of the conversion option as of the issuance date which amounted to \$12 was recognized in other equity reserves. As of December 31, 2019 and 2018, the conversion price per ADS for the 2020 Convertible Notes was \$10.73 and \$11.01 dollars, respectively. After antidilution adjustments, the conversion rate for the 2020 Convertible Notes as of December 31, 2019 and 2018 was 93.2334 and 90.8592 ADS per each 1 thousand dollars principal amount of such notes.

(Millions of U.S. dollars)

Other financial obligations - continued

IV. Mandatorily convertible securities due in 2019

In December 2009, the Parent Company exchanged debt into \$315 principal amount of 10% mandatorily convertible securities denominated in pesos with maturity in November 2019. On November 28, 2019, the securities expired and were converted into 236 million CPOs at a conversion price in pesos equivalent to \$0.8937 per CPO.

16.3) FAIR VALUE OF FINANCIAL INSTRUMENTS

Financial assets and liabilities

The book values of cash, trade receivables, other accounts receivables, trade payables, other accounts payable and accrued expenses, as well as short-term debt, approximate their corresponding estimated fair values due to the revolving nature of these financial assets and liabilities in the short-term.

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.

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 such 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 or of its counterparties.

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 to fluctuations in interest rates and foreign exchange rates. The notional amounts of derivative instruments do not represent amounts of cash 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 on the basis of the notional amounts and other terms included in the derivative instruments.

As of December 31, 2019 and 2018, the carrying amounts of financial assets and liabilities and their respective fair values were as follows:

	2019		2018	3
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Derivative financial instruments (notes 13.2 and 16.4) \$	2	2	\$ 15	15
Other investments and non-current accounts receivable (note 13.2).	234	234	253	253
\$	236	236	\$ 268	268
Financial liabilities				
Long-term debt (note 16.1)\$	9,303	9,711	\$ 9,266	9,147
Other financial obligations (note 16.2)	1,044	1,071	1,592	1,552
Derivative financial instruments (notes 16.4 and 17)	46	46	21	21
\$	10,393	10,828	\$ 10,879	10,720

As of December 31, 2019 and 2018, assets and liabilities carried at fair value in the consolidated statements of financial position are included in the following fair value hierarchy categories (note 2.6):

2019		Level 1	Level 2	Level 3	Total
Assets measured at fair value		•	*	•	
Derivative financial instruments (notes 13.2 and 16.4)	\$	_	2	_	2
Investments in strategic equity securities (note 13.2)		3	_	_	3
Other investments at fair value through earnings (note 13.2)		_	34	_	34
	\$	3	36		39
Liabilities measured at fair value					
Derivative instruments (notes 16.4 and 17)	\$		46	_	46
2018		Level 1	Level 2	Level 3	Total
2018 Assets measured at fair value	_	Level 1	Level 2	Level 3	Total
	- \$	Level 1	Level 2	Level 3	Total
Assets measured at fair value	\$	Level 1	· · · · · · · · · · · · · · · · · · ·	Level 3	Total 15 11
Assets measured at fair value Derivative financial instruments (notes 13.2 and 16.4)	\$	Level 1	· · · · · · · · · · · · · · · · · · ·	Level 3	Total 15 11 22
Assets measured at fair value Derivative financial instruments (notes 13.2 and 16.4)	\$ _ \$_	Level 1 - 11 - 11	15		15 11 22 48
Assets measured at fair value Derivative financial instruments (notes 13.2 and 16.4)	\$ \$ _	- 11 -	15 - 22		15 11 22

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

16.4) 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 16.5), 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; c) hedge of forecasted transactions; and d) other corporate purposes.

As of December 31, 2019 and 2018, the notional amounts and fair values of CEMEX's derivative instruments were as follows:

	2019	9	2018		
	Notional amount	Fair value	Notional amount	Fair value	
I. Net investment hedge	\$ 1,154	(67)	1,249	2	
II. Interest rate swaps	1,000	(35)	1,126	(8)	
III. Equity forwards on third party shares	74	1	111	2	
IV. Fuel price hedging	96	1	122	(14)	
	\$ 2,324	(100)	2,608	(18)	

The caption "Financial income and other items, net" in the income statement includes gains and losses related to the recognition of changes in fair values of the derivative financial instruments during the applicable period, which represented net losses of \$1 in 2019, net gains of \$39 in 2018 and net gains of \$9 in 2017.

I. Net investment hedge

As of December 31, 2019 and 2018, there are Dollar / Mexican peso foreign exchange forward contracts under a program that started at around \$1,250, which notional can be adjusted in relation to hedged risks, with monthly revolving settlement dates from 1 to 24 months. The average life of these contracts is approximately one year. For accounting purposes under IFRS, CEMEX has designated this program as a hedge of CEMEX's net investment in Mexican pesos, pursuant to which changes in fair market value of these instruments are recognized as part of other comprehensive income in equity. For the years 2019, 2018 and 2017, these contracts generated losses of \$126, \$59 and gains of \$6, respectively, which partially offset currency translation results in each year recognized in equity generated from CEMEX's net assets denominated in Mexican pesos due to the appreciation of the peso in 2019 and 2018 and the depreciation of the peso in 2017.

II. Interest rate swap contracts

As of December 31, 2019 and 2018, CEMEX held interest rate swaps for a notional amount of \$1,000 the fair value of which represented a liability of \$35 and \$19, respectively, negotiated in June 2018 to fix interest payments of existing bank loans bearing floating rates. The contracts mature in June 2023. For accounting purposes under IFRS, CEMEX designated these contracts as cash flow hedges, pursuant to which, changes in fair value are initially recognized as part of other comprehensive income in equity and are subsequently allocated through financial expense as interest expense on the related bank loans is accrued. For the years ended in 2019 and 2018, changes in fair value of these contracts generated losses of \$26 and \$19, respectively, recognized in other comprehensive income.

As of December 31, 2018, CEMEX had an interest rate swap maturing in September 2022 associated with an agreement entered by CEMEX for the acquisition of electric energy in Mexico, the fair value of which represented assets of \$11. Pursuant to this instrument, during the tenure of the swap and based on its notional amount, CEMEX receives fixed rate of 5.4% and pays LIBOR. Changes in the fair value of this interest rate swap generated losses of \$6 in 2018 and \$6 in 2017, recognized in the income statement for each period. During 2019, CEMEX unwound and settled its interest rate swap.

III. Equity forwards on third party shares

As of December 31, 2019 and 2018, CEMEX maintained equity forward contracts with cash settlement in March 2021 and March 2020, respectively, over the price of 13.9 million shares of GCC in 2019 and 20.9 million in 2018, in connection with the sale of CEMEX's remaining GCC shares in September 2017 (note 13.1). During 2019 and 2018, CEMEX early settled a portion of these contracts for 6.9 and 10.6 million shares, respectively. Changes in the fair value of these instruments and early settlement effects generated gains of \$2 in 2019, gains of \$26 in 2018 and losses of \$24 in 2017 recognized within "Financial income and other items, net" in the income statement.

IV. Fuel price hedging

As of December 31, 2019 and 2018, CEMEX maintained forward and option contracts negotiated to hedge the price of certain fuels, including diesel, and gas, as solid fuel, in several operations for aggregate notional amounts of \$96 and \$122, respectively, with an estimated aggregate fair value representing assets of \$1 in 2019 and liabilities of \$14 in 2018. By means of these contracts, for its own consumption only, CEMEX fixed the price of these fuels over certain volumes representing a portion of the estimated consumption of such fuels in several operations. These contracts have been designated as cash flow hedges of diesel, gas or coal consumption, and as such, changes in fair value are recognized temporarily through other comprehensive income and are recycled to operating expenses as the related fuel volumes are consumed. For the years 2019, 2018 and 2017, changes in fair value of these contracts recognized in other comprehensive income represented gains of \$15, losses of \$35 and gains of \$4, respectively.

(Millions of U.S. dollars)

16.5) RISK MANAGEMENT

Enterprise risks may arise from any of the following situations: i) the potential change in the value of assets owned or reasonably anticipated to be owned, ii) the potential change in value of liabilities incurred or reasonably anticipated to be incurred, iii) the potential change in value of services provided, purchase or reasonably anticipated to be provided or purchased in the ordinary course of business, iv) the potential change in the value of assets, services, inputs, products or commodities owned, produced, manufactured, processed, merchandised, leased or sell or reasonably anticipated to be owned, produced, manufactured, processed, merchandising, leasing or selling in the ordinary course of business, or v) any potential change in the value arising from interest rate or foreign exchange rate exposures arising from current or anticipated assets or liabilities.

In the ordinary course of business, CEMEX is exposed to commodities risk, including the exposure from inputs such as fuel, coal, petcoke, fly-ash, gypsum and other industrial materials which are commonly used by CEMEX in the production process, and expose CEMEX to variations in prices of the underlying commodities. To manage this and other risks, such as credit risk, interest rate risk, foreign exchange risk, equity risk and liquidity risk, considering the guidelines set forth by the Parent Company's Board of Directors, which represent CEMEX's risk management framework and that are supervised by several Committees, CEMEX's management establishes specific policies that determine strategies oriented to obtain natural hedges to the extent possible, such as avoiding customer concentration on a determined market or aligning the currencies portfolio in which CEMEX incurred its debt, with those in which CEMEX generates its cash flows.

As of December 31, 2019 and 2018, these strategies are sometimes complemented with the use of derivative financial instruments as mentioned in note 16.4, such as the commodity forward contracts on fuels negotiated to fix the price of these underlying commodities.

The main risk categories are mentioned below:

Credit risk

Credit risk is the risk of financial loss faced by CEMEX if a customer or counterparty to a financial instrument does not meet its contractual obligations and originates mainly from trade accounts receivable. As of December 31, 2019 and 2018, 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. Exposure to credit risk is monitored constantly according to the payment behavior of 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 tolerance 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. Thresholds 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, 2019, considering CEMEX's best estimate of potential expected losses based on the ECL model developed by CEMEX (note 9), the allowance for expected credit losses was \$116.

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 accounting exposure to the risk of changes in market interest rates relates primarily to its long-term debt obligations with floating interest rates, which, if such rates were to increase, may adversely affect its financing cost and the results for the period.

Nonetheless, it is not economically efficient to concentrate on fixed rates at a high point when the interest rates market expects a downward trend. That is, there is an opportunity cost for continuing to pay a determined fixed interest rate when the market rates have decreased and the entity may obtain improved interest rate conditions in a new loan or debt issuance. CEMEX manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to reduce its interest costs. In addition, when the interest rate of a debt instrument has turned relatively high as compared to current market rates, CEMEX intends to renegotiate the conditions or repurchase the debt, to the extent the net present value of the expected future benefits from the interest rate reduction would exceed the cost and commissions that would have to be paid in such renegotiation or repurchase of debt.

As of December 31, 2019 and 2018, 22% and 37%, respectively, of CEMEX's long-term debt was denominated in floating rates at a weighted-average interest rate of LIBOR plus 285 basis points in 2019 and 241 basis points in 2018. As of December 31, 2019 and 2018, if interest rates at that date had been 0.5% higher, with all other variables held constant, CEMEX's net income for 2019 and 2018 would have reduced by \$19 and \$19, respectively, as a result of higher interest expense on variable rate denominated debt. This analysis does not include the effect of interest rate swaps held by CEMEX during 2019 and 2018.

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

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, 2019, 21% of CEMEX's net sales, before eliminations resulting from consolidation, were generated in Mexico, 27% in the United States, 5% in the United Kingdom, 6% in France, 3% in Germany, 2% in Spain, 5% in the Rest of Europe region, 4% in Colombia, 2% in Panama, 2% in Dominican Republic, 1% Caribbean TCL, 4% in the Rest of South, Central America and the Caribbean region, 3% in Philippines, 5% in Israel, 2% in the Rest of Asia, Middle East and Africa and 8% in CEMEX's other operations.

Foreign exchange results incurred through monetary assets or liabilities in a currency different from its functional currency are recorded in the consolidated income statements. Exchange fluctuations associated with foreign currency indebtedness directly related to the acquisition of foreign entities and exchange fluctuations in related parties' long-term balances denominated in foreign currency that are not expected to be settled in the foreseeable future, are recognized in the statement of other comprehensive income. As of December 31, 2019 and 2018, excluding from the sensitivity analysis the impact of translating the net assets denominated in currencies different from CEMEX's presentation currency, considering a hypothetic 10% strengthening of the dollar against the Mexican peso, with all other variables held constant, CEMEX's net income for 2019 and 2018 would have decreased by \$76 and \$63, 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, 2019, 67% of CEMEX's financial debt was Dollar-denominated, 23% was Euro-denominated, 6% was Pound-denominated and 2% was Philippine peso-denominated. Therefore, CEMEX had a foreign currency exposure arising mainly from the Dollar-denominated and Euro-denominated financial debt versus the several currencies in which CEMEX's revenues are settled in most countries in which it operates. The amounts of Pound-denominated financial debt and Philippine peso-denominated financial debt outstanding as of December 31, 2019, are closely related to the amount of revenues generated in such currencies and/or, in the case of the Euro-denominated financial debt, the amount of CEMEX's net assets denominated in such currencies; therefore, CEMEX considers that the foreign currency risk related to these amounts of debt is low. Nonetheless, CEMEX cannot guarantee that it will generate sufficient revenues in dollars, euros, pounds and Philippine pesos from its operations to service these obligations. As of December 31, 2019 and 2018, CEMEX had not implemented any derivative financing hedging strategy to address this foreign currency risk. Nonetheless, CEMEX may enter into derivative financing hedging strategies in the future if either of its debt portfolio currency mix, interest rate mix, market conditions and/or expectations changes.

2019

South, Central Asia, Middle

As of December 31, 2019 and 2018, CEMEX's consolidated net monetary assets (liabilities) by currency are as follows:

			United		America and	East and		
	_	Mexico	States	Europe	the Caribbean	Africa	Others ¹	Total
Monetary assets	\$	721	1,017	1,001	280	592	190	3,801
Monetary liabilities		1,311	2,444	2,481	589	681	10,220	17,726
Net monetary assets (liabilities) 2	\$	(590)	(1,427)	(1,480)	(309)	(89)	(10,030)	(13,925)
Out of which:								
Dollars	\$	(23)	(1,427)	(5)	(72)	5	(6,715)	(8,237)
Pesos		(567)	_	_	_	_	(144)	(711)
Euros		_	_	(519)	1	_	(2,505)	(3,023)
Pounds		_	_	(807)	_	_	20	(787)
Other currencies		_	_	(149)	(238)	(94)	(686)	(1,167)
	\$	(590)	(1,427)	(1,480)	(309)	(89)	(10,030)	(13,925)
					2018			
	_				South, Central	Asia, Middle		
			United		America and	East and		
	_	Mexico	States	Europe	the Caribbean	Africa	Others ¹	Total
Monetary assets	\$	427	507	670	308	520	153	2,585
Monetary liabilities		1,007	1,703	2,043	552	624	10,215	16,144
Net monetary assets (liabilities) 2	\$	(580)	(1,196)	(1,373)	(244)	(104)	(10,062)	(13,559)
Out of which:	_							
Dollars	\$	(28)	(1,196)	8	(48)	1	(5.989)	(7,252)
Pesos		(552)		_	`	_	(278)	(830)
Euros		` _	_	(538)	_	_	(2,694)	(3,232)
Pounds		_	_	(928)	_	_	(438)	(1,366)
Other currencies				85	(196)	(105)	(663)	(879)

- 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.

(Millions of U.S. dollars)

Foreign currency risk - continued

In addition, considering that the Parent Company's functional currency for all assets, liabilities and transactions associated with its financial and holding company activities is the dollar (note 2.4), there is foreign currency risk associated with the translation of subsidiaries' net assets denominated in different currencies (peso, euro, pounds and other currencies) into dollars. When the dollar appreciates, the value of CEMEX's net assets denominated in other currencies decreases in terms of dollars, generating negative foreign currency translation and reducing stockholders' equity. Conversely, when the dollar depreciates, the value of CEMEX's net assets denominated in other currencies would increase in terms of dollars generating the opposite effect. As mentioned in note 16.4, CEMEX has implemented a long-term program for up to \$1,250 to hedge foreign currency translation in connection with its net assets denominated in pesos.

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.A.B. de C.V.'s and/or third party's shares. As described in note 16.4, considering specific objectives, CEMEX has entered into equity forward contracts on third-party shares, as well as capped calls based on the price of CEMEX, S.A.B. de C.V.'s own ADSs. Under these equity derivative instruments, there is a direct relationship from 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 the income statement as part of "Financial income and other items, net." During 2017, all outstanding capped calls based on the price of CEMEX, S.A.B. de C.V.'s own ADSs were early settled.

As of December 31, 2019 and 2018, the potential change in the fair value of CEMEX's forward contracts in GCC shares that would result from a hypothetical, instantaneous decrease of 10% in the market price of GCC shares in dollars, with all other variables held constant, CEMEX's net income would have reduced by \$7 in 2019 and \$11 in 2018, as a result of additional negative changes in fair value associated with these forward contracts. A 10% hypothetical increase in the price of GCC shares would have generated 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 23.1.

As of December 31, 2019, current liabilities, which included \$1,443 of current maturities of debt and other financial obligations, exceed current assets by \$830. For the year ended December 31, 2019, CEMEX generated net cash flows provided by operating activities from continuing operations of \$1,284, after payments of interest and income taxes. The Company's management considers that CEMEX will generate sufficient cash flows from operations in the following twelve months. In addition, as of December 31, 2019, CEMEX has committed available lines of credit under its 2017 Credit Agreement, which includes the revolving credit facility and an undrawn tranche for a combined amount of \$1,135, as well as CEMEX's proven capacity to continually refinance and replace its short-term obligations, will enable CEMEX to meet any liquidity risk in the short-term.

As of December 31, 2019 and 2018, the potential requirement for additional margin calls under our different commitments is not significant.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

17) OTHER CURRENT AND NON-CURRENT LIABILITIES

17.1) OTHER CURRENT LIABILITIES

As of December 31, 2019 and 2018, consolidated other current liabilities were as follows:

	 2019	2018
Provisions ¹	\$ 558	536
Interest payable	88	94
Other accounts payable and accrued expenses ²	313	266
Contract liabilities with customers (note 3) ³	 225	234
	\$ 1,184	1,130

- 1 Current provisions primarily consist of accrued employee benefits, insurance payments, accruals for legal assessments and others. These amounts are revolving in nature and are expected to be settled and replaced by similar amounts within the next 12 months.
- 2 As of December 31, 2019 and 2018, includes \$22 and \$30, respectively, of the current portion of other taxes payable in Mexico.
- 3 As of December 31, 2019 and 2018, contract liabilities with customers included \$184 and \$195, respectively, of advances received from customers, as well as in 2019 the current portion of deferred revenues in connection with commercial agreements of Cemento Bayano, S.A. ("Cemento Bayano") of \$4 as described below.

17.2) OTHER NON-CURRENT LIABILITIES

As of December 31, 2019 and 2018, consolidated other non-current liabilities were as follows:

		2019	2018
Asset retirement obligations ¹	\$	497	408
Accruals for legal assessments and other responsibilities ²		30	45
Non-current liabilities for valuation of derivative instruments		46	21
Environmental liabilities ³		29	29
Other non-current liabilities and provisions 4,5	_	323	257
	\$	925	760

- 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, 2019 and 2018, includes \$31 and \$50, respectively, of the non-current portion of taxes payable in Mexico.
- As of December 31, 2019, in connection with the sale of CEMEX's non-controlling interest in Cemento Interoceánico and the related commercial agreements between the Purchaser and Cemento Bayano (note 13.1), the balance includes deferred revenues of \$50 that will be amortized to the income statement as deliverables are fulfilled over the 10-year maturity of the agreements.

Changes in consolidated other current and non-current liabilities for the years ended December 31, 2019 and 2018, were as follows:

-			2019										
		Asset		Accruals	Valuation of								
		retirement	Environmental	for legal	derivative	Other liabilities							
		obligations	liabilities	proceedings	instruments	and provisions	Total	2018					
Balance at beginning of period	\$	408	29	45	35	818	1,335	1,452					
Additions or increase in estimates.		141	1	18	26	1,455	1,641	1,382					
Releases or decrease in estimates		(47)	1	(34)	_	(1,447)	(1,527)	(1,454)					
Reclassifications		43	_	_	_	19	62	(20)					
Accretion expense		(12)	_	_	_	(47)	(59)	(59)					
Foreign currency translation		(36)	(2)	1	41	68	72	34					
Balance at end of period	\$	497	29	30	102	866	1,524	1,335					
Out of which:	٠					-		<u> </u>					
Current provisions	\$	_	_	_	56	543	599	536					

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

18) PENSIONS AND POST-EMPLOYMENT BENEFITS

Defined contribution pension plans

The consolidated costs of defined contribution plans for the years ended December 31, 2019, 2018 and 2017 were \$50, \$45 and \$49, 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 of 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 earnings and/or in "Other comprehensive income" for the period in which they are generated, as appropriate. For the years ended December 31, 2019, 2018 and 2017, the effects of pension plans and other post-employment benefits are summarized as follows:

		Pensions			Otl	ner benefit	s	Total		
Net period cost (income):		2019	2018	2017	2019	2018	2017	2019	2018	2017
Recorded in operating costs and expenses										
Service cost	\$	10	10	12	2	3	2	12	13	14
Past service cost		1	9	(3)	_	_	_	1	9	(3)
Settlements and curtailments		(3)	_	_	_	_	_	(3)	_	
		8	19	9	2	3	2	10	22	11
Recorded in other financial expenses										
Net interest cost		34	35	37	5	5	4	39	40	41
Recorded in other comprehensive income										
Actuarial (gains) losses for the period		203	(176)	1	7	_	(1)	210	(176)	_
	\$	245	(122)	47	14	8	5	259	(114)	52

As of December 31, 2019 and 2018, the reconciliation of the actuarial benefits' obligations and pension plan assets, are presented as follows:

	Pensi	ons	Other be	enefits	Total		
_	2019	2018	2019	2018	2019	2018	
Change in benefits obligation:							
Projected benefit obligation at beginning of the period \$	2,375	2,794	79	73	2,454	2,867	
Service cost	10	10	2	3	12	13	
Interest cost	78	83	5	5	83	88	
Actuarial (gains) losses	268	(265)	7	_	275	(265)	
Additions through business combinations	=	_	=	6	=	6	
Settlements and curtailments	(3)	_	_	_	(3)	_	
Reduction from disposal of assets	(2)	_	=	_	(2)	=	
Plan amendments	1	9	_	_	1	9	
Benefits paid	(141)	(146)	(7)	(5)	(148)	(151)	
Foreign currency translation	65	(110)	1	(3)	66	(113)	
Projected benefit obligation at end of the period	2,651	2,375	87	79	2,738	2,454	
Change in plan assets:							
Fair value of plan assets at beginning of the period	1,486	1,662	1	1	1,487	1,663	
Return on plan assets	44	48	_	_	44	48	
Actuarial (gains) losses	65	(89)	_	_	65	(89)	
Employer contributions	103	81	7	5	110	86	
Reduction for disposal of assets	(1)	_	_	_	(1)	_	
Benefits paid	(141)	(146)	(7)	(5)	(148)	(151)	
Foreign currency translation	43	(70)	=	_	43	(70)	
Fair value of plan assets at end of the period	1,599	1,486	1	1	1,600	1,487	
Net projected liability in the statement of financial position \$	1,052	889	86	78	1,138	967	

For the years 2019, 2018 and 2017, actuarial (gains) losses for the period were generated by the following main factors as follows:

	2019	2018	2017
Actuarial (gains) losses due to experience	\$ 5	(58)	6
Actuarial (gains) losses due to demographic assumptions	(11)	(57)	(2)
Actuarial (gains) losses due financial assumptions	216	(61)	(4)
	\$ 210	(176)	

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES **Notes to the Consolidated Financial Statements**

As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Pensions and post-employment benefits - continued

In 2019, net actuarial losses due to financial assumptions were mainly driven by a general decrease in the discount rates applicable to the calculation of the benefits' obligations mainly in the United Kingdom, the United States, Germany and Mexico, as market interest rates decrease globally in 2019 as compared to 2018, partially offset by actual returns in plan assets higher than estimated in the United Kingdom and the United States. In 2018, net actuarial gains due to financial assumptions were mainly generated by a general increase in the discounts rates applied for the calculation of the pension benefit obligations in the United Kingdom, Germany, United States and Mexico, among others, resulting from the increase in market interest rates after several years in which such rates reached historically low levels.

As of December 31, 2019 and 2018, based on the hierarchy of fair values, plan assets are detailed as follows:

	2019					2018			
	Level 1	Level 2	Level 3	Total		Level 1	Level 2	Level 3	Total
Cash	\$ 45	16	_	61	\$	36	_	_	36
Investments in corporate bonds	4	396	_	400		7	342	_	349
Investments in government bonds	90	450	_	540	_	84	345	_	429
Total fixed-income securities	139	862	-	1,001		127	687	-	814
Investment in marketable securities	223	157	_	380		259	79	_	338
Other investments and private funds	46	85	88	219	_	50	212	73	335
Total variable-income securities	269	242	88	599		309	291	73	673
Total plan assets	\$ 408	1,104	88	1,600	\$	436	978	73	1,487

The most significant assumptions used in the determination of the benefit obligation were as follows:

			2019		2018						
	Mexico	United States	United Kingdom	Range of rates in other countries	Mexico	United States	United Kingdom	Rates ranges in other countries			
Discount rates	8.75%	3.6%	2.1%	0.4% - 8.8%	10.8%	4.5%	2.9%	1.3% - 7.5%			
Rate of return on plan assets	8.75%	3.6%	2.1%	0.4% - 8.8%	10.8%	4.5%	2.9%	1.3% - 7.5%			
Rate of salary increases	4.0%	_	3.0%	2.3% - 6.8%	4.0%	_	3.3%	2.3% - 6.0%			

As of December 31, 2019, estimated payments for pensions and other post-employment benefits over the next 10 years were as follows:

		2019
2020 1	\$	156
2021		140
2022		142
2023		144
2024 – 2029	-	852

The amount of estimated payments during the year 2020 includes the expected funding to the Company's plan assets.

As of December 31, 2019 and 2018, the aggregate projected benefit obligation ("PBO") for pension plans and other post-employment benefits and the plan assets by country were as follows:

	2019				2018			
	PBO	Assets	Deficit		PBO	Assets	Deficit	
Mexico\$	203	24	179	\$	168	30	138	
United States	297	219	78		286	174	112	
United Kingdom ¹	1,681	1,128	553		1,464	1,057	407	
Germany	204	9	195		202	10	192	
Other countries	353	220	133		334	216	118	
\$	2,738	1,600	1,138	\$	2,454	1,487	967	

Applicable regulation in the United Kingdom requires to maintain plan assets at a level similar to that of the obligations. Beginning in 2012, the pension fund receives annual dividends of \$20, increasing at a 5% rate per year, from a limited partnership (the "Partnership"), whose assets transferred by CEMEX UK of an approximate value of \$553, are leased back to CEMEX UK. The Partnership is owned, controlled and consolidated by CEMEX UK. In 2037, on expiry of the arrangement, the Partnership will be terminated and under the terms of the agreement, the remaining assets will be distributed to CEMEX UK. Distributions from the Partnership to the pension fund are considered as employer contributions to plan assets in the period in which they occur.

(Millions of U.S. dollars)

Pensions and post-employment benefits – continued

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, 2019 and 2018, the projected benefits obligation related to these benefits was \$62 and \$58, respectively, included within other benefits liability. The medical inflation rates used to determine the projected benefits obligation of these benefits in 2019 and 2018 for Mexico were 8.0% and 7.0%, respectively, for Puerto Rico 6.3% and 6.2%, respectively, and for the United Kingdom were 6.5% and 6.8%, respectively. In connection with the acquisition of TCL (note 4.1), CEMEX integrated TCL's consolidated health care benefits into its operations. For 2019 and 2018, the medical inflation rate used to determine the projected benefits obligation was 8.0% in 2019 and 5.0% in 2018.

Significant events of settlements or curtailments related to employees' pension benefits and other post-employment benefits during the reported periods

During 2019, CEMEX in France closed two legal entities resulting in a curtailment gain of \$3, which were recognized in the income statement for the period. There were no significant events during 2018. During 2017, CEMEX in Spain removed certain increases in pension benefits which resulted in an adjustment to past service cost generating gains of \$5 in 2017, recognized in the income statement for the year. In addition, due to the acquisition of TCL (note 4.1), CEMEX integrated TCL's consolidated pensions plans, which were fully funded, as well as TCL's consolidated health care benefits which represented an increase in the net projected liability of \$6 in 2018 upon conclusion of the purchase price allocation.

Sensitivity analysis of pension and other post-employment benefits

For the year ended December 31, 2019, 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, 2019 are shown below:

	Pension	S	Other be	nefits	Total		
Assumptions:	+50 bps	-50 bps	+50 bps	-50 bps	+50 bps	-50 bps	
Discount Rate Sensitivity \$	(175)	196	(4)	5	(179)	201	
Salary Increase Rate Sensitivity	8	(7)	_	_	8	(7)	
Pension Increase Rate Sensitivity	126	(105)	_	_	126	(105)	

Multiemployer defined benefit pension plans

In addition to the Company's sponsored plans, certain union employees in the United States and the United Kingdom are covered under multiemployer defined benefit plans administered by their unions. The Company's funding arrangements, rate of contributions and funding requirements were made in accordance with the contractual multiemployer agreements. The combined amounts contributed to the multiemployer plans were \$18 in 2019, \$17 in 2018 and \$17 in 2017. The Company expects to contribute approximately \$19 to the multiemployer plans in 2020.

In addition to the funding described in the preceding paragraph, CEMEX negotiated with a union managing a multiemployer plan in the United States the change of the plan from defined benefit to defined contribution beginning on September 29, 2019. This change generated a one-time settlement obligation of \$24 recognized in the income statement in 2019 as part of other expenses, net, against an accrued liability. Payments are expected to be made over the next 20 years though lump sum payment is allowable.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

19) INCOME TAXES

19.1) INCOME TAXES FOR THE PERIOD

The amounts of income tax expense in the statements of operations for 2019, 2018 and 2017 are summarized as follows:

	2019	2018	2017
Current income tax expense	\$ 143	99	184
Deferred income tax expense (revenue)	19	125	(168)
	\$ 162	224	16

19.2) DEFERRED INCOME TAXES

As of December 31, 2019 and 2018, the main temporary differences that generated the consolidated deferred income tax assets and liabilities are presented below:

	_	2019	2018
Deferred tax assets:			
Tax loss carryforwards and other tax credits	\$	757	702
Accounts payable and accrued expenses		458	338
Intangible assets, net	_	57	142
Total deferred tax assets, gross		1,272	1,182
Presentation offset regarding same legal entity		(645)	(564)
	_	627	618
Deferred tax liabilities:	_		
Property, machinery and equipment and right-of-use asset, net		(1,323)	(1,283)
Investments and other assets		(42)	(29)
Total deferred tax liabilities, gross	_	(1,365)	(1,312)
Presentation offset regarding same legal entity		645	564
Total deferred tax liabilities, net in the statement of financial position	_	(720)	(748)
Net deferred tax liabilities	\$	(93)	(130)
Out of which:	_	<u>-</u>	
Net deferred tax liability in Mexican entities ¹	\$	(157)	(205)
Net deferred tax asset in Foreign entities ²		64	75
Net deferred tax liability	\$	(93)	(130)
	-	` /	

¹ Net deferred tax liabilities in Mexico mainly refer to a temporary difference resulting when comparing at the reporting date the carrying amount of property, machinery and equipment, as per IFRS, and their corresponding tax values (remaining tax-deductible amount), partially offset by certain deferred tax assets from tax loss carryforwards that are expected to be recovered in the future against taxable income. When the book value is greater than the related tax value results in a deferred tax liability. In 2011, upon transition to IFRS, CEMEX elected to measure its fixed assets at fair value, which resulted in a significant increase in book value, mainly associated with the revaluation of mineral reserves. Such restated amounts are depleted to the income statement in a period over 35 years, generating accounting expense that is not tax-deductible; hence the temporary difference will gradually reverse over time but does not represent a payment obligation to the tax authority at the reporting date.

As of December 31, 2019 and 2018, balances of the deferred tax assets and liabilities included in the statement of financial position are located in the following entities:

	_	2019					2018	
		Asset	Liability	Net		Asset	Liability	Net
Mexican entities	\$	189	(346)	(157)	\$	174	(379)	(205)
Foreign entities		438	(374)	64		444	(369)	75
	\$	627	(720)	(93)	\$	618	(748)	(130)

² Net deferred tax assets in foreign entities in 2019 and 2018 are mainly related to tax loss carryforwards recognized in prior years, mainly in the United States, that are expected to be recovered in the future against taxable income.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Deferred income taxes - continued

The breakdown of changes in consolidated deferred income taxes during 2019, 2018 and 2017 was as follows:

	2019	2018	2017
Deferred income tax expense (revenue) in the income statement ¹	\$ 19	125	(168)
Deferred income tax revenue in stockholders' equity ²	(59)	(10)	(11)
Reclassifications ³	3	3	5
Change in deferred income tax during the period	\$ (37)	118	(174)

- 1 In 2017, includes net income tax revenue related to the recognition of deferred income tax assets in CEMEX's operations in the United States (note 19.4).
- 2 In 2018, includes a deferred income tax revenue of \$8 in connection with the adoption of IFRS 9 on January 1, 2018.
- 3 In 2019, 2018 and 2017, refers to the effects of the reclassification of balances to assets held for sale and related liabilities (note 4.2).

Current and/or deferred income tax relative to items of other comprehensive income during 2019, 2018 and 2017 were as follows:

	2019	2018	2017
Revenue related to foreign exchange fluctuations from intercompany balances (note 20.2)	\$ (19)	(2)	(2)
Expense (revenue) associated to actuarial results (note 20.2)	(29)	31	_
Revenue related to derivative financial instruments (note 16.4)	(34)	(3)	=
Expense (revenue) from foreign currency translation and other effects	 4	(38)	(11)
	\$ (78)	(12)	(13)

As of December 31, 2019, consolidated tax loss and tax credits carryforwards expire as follows:

	Amount of carryforwards	Amount of unrecognized carryforwards	Amount of recognized carryforwards
2020	\$ 58	56	2
2021	202	176	26
2022	301	273	28
2023	437	432	5
2024 and thereafter	14,497	11,479	3,018
	\$ 15,495	12,416	3,079

As of December 31, 2019, 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 \$3,079 in consolidated pretax income in future periods. 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, along with the implementation of feasible tax strategies, CEMEX believes that it will recover the balance of its tax loss carryforwards that have been recognized 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 refers 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.

The Parent Company does not recognize a deferred income tax liability related to its investments in subsidiaries 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.

19.3) RECONCILIATION OF EFFECTIVE INCOME TAX RATE

For the years ended December 31, 2019, 2018 and 2017, the effective consolidated income tax rates were as follows:

		2019	2018	2017
Earnings before income tax	\$	253	717	661
Income tax expense		(162)	(224)	(16)
Effective consolidated income tax expense rate ¹	-	64.0%	31.2%	2.4%

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 the income statement.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

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 2019, 2018 and 2017 were as follows:

_	2019		2018		2017	
_	%	\$	%	\$	%	\$
Mexican statutory tax rate	30.0	76	30.0	215	30.0	198
Difference between accounting and tax expenses, net ¹	109.2	277	18.7	134	18.7	124
Non-taxable sale of equity securities and fixed assets	(13.4)	(34)	(4.6)	(33)	(15.0)	(99)
Difference between book and tax inflation	38.1	96	19.5	140	31.2	206
Differences in the income tax rates in the countries where						
CEMEX operates ²	(31.9)	(81)	(16.0)	(115)	(21.9)	(145)
Changes in deferred tax assets ³	(59.8)	(151)	(15.6)	(112)	(39.8)	(263)
Changes in provisions for uncertain tax positions	(5.2)	(13)	(1.8)	(13)	0.3	2
Others	(3.0)	(8)	1.0	8	(1.1)	(7)
Effective consolidated income tax expense rate	64.0	162	31.2	224	2.4	16

- 1 In 2019, includes \$117 of difference between book and tax foreign exchange fluctuations of the Parent Company.
- 2 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. In 2018 and 2017, includes the effect related to the change in statutory tax rate in Colombia and the United States, respectively (note 19.4).
- 3 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 statement of financial position for the years ended December 31, 2019 and 2018:

	201	9	2018			
	Changes in the statement of		8		Changes in the statement of	
	financial position	Amounts in reconciliation	financial position	Amounts in reconciliation		
Tax loss carryforwards generated and not recognized during the year \$	=	84	=	139		
Derecognition related to tax loss carryforwards recognized in prior years.	(43)	(43)	(92)	(3)		
Recognition related to unrecognized tax loss carryforwards	92	92	5	5		
Foreign currency translation and other effects	6	18	(29)	(29)		
Changes in deferred tax assets\$	55	151	(116)	112		

19.4) UNCERTAIN TAX POSITIONS AND SIGNIFICANT TAX PROCEEDINGS

Uncertain tax positions

As of December 31, 2019 and 2018, as part of current provisions and non-current 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, 2019, 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, 2019, 2018 and 2017, excluding interest and penalties, is as follows:

	2019	2018	2017
Balance of tax positions at beginning of the period	\$ 44	80	55
Adoption effects of IFRIC 23 credited to retained earnings (note 2.1)	(6)	_	_
Additions for tax positions of prior periods	=	1	1
Additions for tax positions of current period	4	6	35
Reductions for tax positions related to prior periods and other items	(13)	(2)	(2)
Settlements and reclassifications	=	(7)	(6)
Expiration of the statute of limitations	(2)	(32)	(7)
Foreign currency translation effects	1	(2)	4
Balance of tax positions at end of the period	\$ 28	44	80

(Millions of U.S. dollars)

Uncertain tax positions - continued

During 2017, considering recoverability analyses and cash flow projections, CEMEX recognized deferred income tax assets related to its operations in the United States for \$700 considering the then applicable income tax rate of 35%. However, regarding the Tax Cuts and Jobs Act (the "Act") enacted on December 22, 2017, the U.S. statutory federal tax rate was reduced from 35% to 21%. For this reason, CEMEX reduced its net deferred tax assets by \$124. The reduction in the U.S. statutory federal tax rate is expected to positively impact CEMEX's future after-tax earnings in the United States.

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 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.

Significant tax proceedings

As of December 31, 2019, the Company's most significant tax proceedings are as follows:

- The tax authorities in Spain have challenged part of the tax loss carryforwards reported by CEMEX España covering the tax years from and including 2006 to 2009. During 2014, the tax authorities in Spain notified CEMEX España of fines in the aggregate amount of \$547. CEMEX España filed appeals against such resolution. On September 20, 2017, CEMEX España was notified about an adverse resolution to such appeals. CEMEX España challenged this decision and applied for the suspension of the payment before the National Court (*Audiencia Nacional*) until the case is finally resolved. On November 6, 2018 CEMEX España obtained a favorable resolution to this request from the National Court through the pledge of certain fixed assets. As of December 31, 2019, CEMEX believes an adverse resolution in this proceeding is not probable and no accruals have been created in connection with this proceeding. Nonetheless, as of December 31, 2019, it is difficult to assess with certainty the likelihood of an adverse result, and the appeals that CEMEX España has filed could take an extended amount of time to be resolved, but if adversely resolved, this proceeding could have a material adverse impact on CEMEX's results of operations, liquidity or financial position.
- On April 6, 2018, CEMEX Colombia received a special proceeding from the Colombian Tax Authority (the "Tax Authority"), where certain deductions included in the 2012 income tax return were rejected. The Tax Authority assessed an increase in the income tax payable by CEMEX Colombia and imposed an inaccuracy penalty for amounts in Colombian pesos equivalent to \$38 of income tax and \$38 of penalty. On June 22, 2018, CEMEX Colombia filed a response to the special proceeding within the legal term. On December 28, 2018, CEMEX Colombia received an official review settlement ratifying the rejected deductible items and amounts. CEMEX Colombia filed a reconsideration request on February 21, 2019. If the proceeding would be adversely resolved in the final stage, CEMEX Colombia must pay the amounts determined in the official settlement plus interest accrued on the amount of the income tax adjustment until the payment date. As of December 31, 2019, in this stage of the proceeding, CEMEX considers that an adverse resolution in this proceeding after conclusion of all available defense procedures is not probable, however, it is difficult to assess with certainty the likelihood of an adverse result in the proceeding; but if adversely resolved, CEMEX believes this proceeding could have a material adverse impact on the operating results, liquidity or financial position of CEMEX. See note 26 for Subsequent Events in connection with this proceeding.
- In September 2012, the Tax Authority requested CEMEX Colombia to amend its income tax return for the year 2011 in connection with several deductible expenses including the amortization of goodwill. CEMEX Colombia rejected the arguments of the ordinary request and filed a motion requesting the case to be closed. The 2011 income tax return was under audit of the Tax Authority from August 2013 until September 5, 2018, when CEMEX Colombia was notified of a special requirement in which the Tax Authority rejects certain deductions included in such income tax return of the year 2011 and determined an increase in the income tax payable and imposed a penalty for amounts in Colombian pesos equivalent to \$26 of income tax and \$26 of penalty. CEMEX Colombia filed a response to the special requirement on November 30, 2018 and the tax authority notified the official review liquidation on May 15, 2019, maintaining the claims of the special requirement; therefore, CEMEX Colombia filed an appeal within the legal term on July 11, 2019. If the proceeding would be adversely resolved in its final stage, CEMEX Colombia would have to pay the amounts determined in the official settlement plus interest accrued on the amount of the income tax adjustment until the date of payment. As of December 31, 2019, in this stage of the proceeding, CEMEX considers that an adverse resolution in this proceeding after conclusion of all available defense procedures is not probable, however, it is difficult to assess with certainty the likelihood of an adverse result in the proceeding; but if adversely resolved, CEMEX believes this proceeding could have a material adverse impact on the operating results, liquidity or financial position of CEMEX.
- In April 2011, the Tax Authority notified CEMEX Colombia of a special proceeding rejecting certain deductions taken by CEMEX Colombia in its 2009 tax return considering they are not linked to direct revenues recorded in the same fiscal year, and assessed an increase in taxes to be paid by CEMEX Colombia and imposed a penalty for amounts in Colombian pesos equivalent to \$27 of income tax and \$27 of penalty, considering changes in law that reduced the original penalty. After several appeals of CEMEX Colombia to the Colombian Tax Authority's special proceeding in the applicable courts in which CEMEX Colombia obtained negative resolutions in each case over the years, in July 2014, CEMEX Colombia filed an appeal against this resolution before the Colombian State Council (*Consejo de Estado*). If the proceeding would be adversely resolved in the final stage, CEMEX Colombia must pay the amounts determined in the official settlement plus interest accrued on the amount of the income tax adjustment until the payment date. As of December 31, 2019, in this stage of the proceeding, CEMEX considers that an adverse resolution in this proceeding after conclusion of all available defense procedures is not probable, however, it is difficult to assess with certainty the likelihood of an adverse result in the proceeding; but if adversely resolved, CEMEX believes this proceeding could have a material adverse impact on the operating results, liquidity or financial position of CEMEX.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

20) STOCKHOLDERS' EOUITY

For purposes of the parent entities applying the equity method of accounting for its investments in subsidiaries under IFRS, total stockholders' equity in the stand-alone statement of financial position is the same as total controlling interest in the consolidated statement of financial position. Nonetheless, considering that: a) CEMEX, S.A.B. de C.V.'s presentation currency continues to be the Mexican peso; and b) under IAS 21, the financial statements in the new presentation currency should be reported as if such financial statements had always been reported in the new presentation currency, which implies that certain items in stockholder's equity including common stock, additional paid-in capital and retained earnings, among others, should be translated and accrued using historical exchange rates of the dates in which the transactions occurred. Altough total amounts are the same, this methodology results in differences between line-by-line items within CEMEX's controlling interest and the Parent Company's stockholder's equity. Moreover, the official stockholder's equity for statutory purposes is that of the Parent Company as expressed in Mexican pesos. As of December 31, 2019, the line-by-line reconciliation between CEMEX's controlling interest, as reported using the dollar as presentation currency, and the Parent Company's stockholders' equity, using a convenience translation of the balances in pesos translated using the exchange rate of 18.92 as of December 31, 2019, is as follows:

	As of December	er 31, 2019
	Consolidated	Parent Company
Common stock and additional paid-in capital ¹ \$	10,424	7,836
Other equity reserves ^{1,2}	(2,724)	(32)
Retained earnings ²	1,621	1,517
Total controlling interest\$	9,321	9,321

- 1 The difference relates to the method of accruing dollars using the historical exchange rates to translate each common stock and additional paid-in capital transaction denominated in Mexican pesos to dollars. The cumulative effect from these changes in exchange rates is recognized against other equity reserves.
- 2 The difference relates with the method of accruing dollars using the exchange rates of each month during the period for income statement purposes. The cumulative effect from these changes in exchange rates is recognized against other equity reserves.

As of December 31,2019 and 2018, stockholders' equity excludes investments in CPOs of the Parent Company held by subsidiaries of \$8 (20,541,277 CPOs) and \$10 (20,541,277 CPOs), respectively, which were eliminated within "Other equity reserves."

20.1) COMMON STOCK AND ADDITIONAL PAID-IN CAPITAL

As of December 31, 2019 and 2018, the breakdown of consolidated common stock and additional paid-in capital was as follows:

	2019	2018
Common stock	\$ 318	318
Additional paid-in capital	10,106	10,013
	\$ 10,424	10,331

As of December 31, 2019 and 2018 the common stock of CEMEX, S.A.B. de C.V. was presented as follows:

	20	19	2018		
Shares ¹	Series A ²	Series B ²	Series A ²	Series B ²	
Subscribed and paid shares	30,214,262,692	15,107,131,346	30,002,628,318	15,001,314,159	
Unissued shares authorized for executives' stock compensation programs	881,442,830	440,721,415	936,375,524	468,187,762	
Repurchased shares ³	315,400,000	157,700,000	307,207,506	153,603,753	
Shares that guarantee/guaranteed the issuance of convertible securities ⁴	2,842,339,760	1,421,169,880	4,529,603,200	2,264,801,600	
Shares authorized for the issuance of stock or convertible securities ⁵	302,144,720	151,072,360	302,144,720	151,072,360	
	34,555,590,002	17,277,795,001	36,077,959,268	18,038,979,634	

- 1 As of December 31, 2019 and 2018, 13,068,000,000 shares correspond to the fixed portion, and 38,765,385,003 shares as of December 31, 2019 and 41,048,938,902 shares as of December 31, 2018, correspond to the variable portion.
- 2 Series "A" or Mexican shares must represent at least 64% of CEMEX's capital stock; Series "B" or free subscription shares must represent at most 36% of CEMEX's capital stock.
- 3 Shares repurchased under the share repurchase program authorized by the Company's shareholders (note 20.2).
- 4 Refers to those shares that guarantee the conversion of outstanding convertible securities, of both, voluntary in 2019 and voluntary and mandatorily in 2018 and those that are leftover from the mandatory conversion that took place in November 2019 (note 16.2).
- 5 Shares authorized for issuance in a public offering or private placement and/or by issuance of new convertible securities.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Common stock and additional paid-in capital - continued

On March 28, 2019, stockholders at the annual ordinary shareholders' meeting approved: (i) a cash dividend of \$150. The dividend was paid in two installments, the first installment, for half of the dividend was paid on June 17, 2019 at the rate of US\$0.001663 per share and the second installment for the remainder of the dividend was paid on December 17, 2019 at the rate of US\$0.001654 per share; (ii) the acquisition of own shares of up to \$500 or its equivalent in Mexican pesos, as the maximum amount of resources that through fiscal year 2019, and until the next ordinary annual shareholder's meeting is held, CEMEX may be used for the acquisition of its own shares or securities that represent such shares; (iii) a decrease of CEMEX's share capital, in its variable part for the amount of \$0.2826, through the cancellation of approximately 2 billion ordinary, registered and without par-value, treasury shares; (iv) a decrease of CEMEX's share capital, in its variable part for the amount in pesos equivalent to \$0.0670 by the cancellation of approximately 461 million ordinary, registered and without par-value, treasury shares; (v) the increase of CEMEX's share capital in its variable part for the amount \$22 thousands, through the issuance of 150 million ordinary shares. The subscription of shares representing the capital increase was made at a theoretical value of \$0.000143 dollars per share, and if applicable plus a premium defined by the Board of Directors. Until December 31, 2019, under the 2019 repurchase program, CEMEX has repurchased 157.7 million CEMEX CPOs, at a weighted-average price in pesos equivalent to \$0.3164 dollars per CPO. The total amount of these CPO repurchases, excluding value-added tax, was \$50.

On April 5, 2018, stockholders at the annual ordinary shareholders' meeting approved: (i) a resolution to increase the variable common stock by issuing up to 750 million shares (250 million CPOs), which will be kept in the Parent Company's treasury and used to be subscribed and paid pursuant to the terms and conditions of CEMEX's long-term compensation stock program, and (ii) the amount of a reserve of up to \$500 or its equivalent in pesos for the year ending December 31, 2018 and until the next ordinary annual shareholders meeting to be held in 2019 for purposes of a Parent Company's share repurchase program. On April 5, 2018, stockholders at the extraordinary shareholders' meeting approved a resolution to increase the variable common stock by issuing up to 453 million shares (151 million CPOs), which will be kept in the Parent Company's treasury for their subscription by means of issuance in a public offer or private placement and/or by issuance of new convertible securities. This authorization expires on April 4, 2023. Until December 31, 2018, under the 2018 repurchase program, CEMEX had repurchased 153.6 million CEMEX CPOs, at a weighted-average price in pesos equivalent to \$0.4883 dollars per CPO. The total amount of these CPO repurchases, excluding value-added tax, was \$75. These CPOs were cancelled during 2019 by resolution of the ordinary shareholders' meeting on March 28, 2019.

On March 30, 2017, 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 1,687 million shares (562 million CPOs), which shares were issued, representing an increase in additional paid-in capital of \$506; and (ii) increase the variable common stock by issuing up to 258 million shares (86 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 16.2).

In connection with the long-term executive share-based compensation programs (note 21) in 2019, 2018 and 2017, CEMEX issued 27.4 million CPOs, 49.3 million CPOs and 53.2 million CPOs, respectively, generating an additional paid-in capital of \$32 in 2019, \$34 in 2018 and \$42 in 2017 associated with the fair value of the compensation received by executives.

20.2) OTHER EQUITY RESERVES

As of December 31, 2019 and 2018 other equity reserves are summarized as follows:

_	2019	2018
Cumulative translation effect, net of effects from perpetual debentures and deferred income taxes		
recognized directly in equity (notes 19.2 and 20.4) \$	(2,098)	(2,180)
Cumulative actuarial losses	(593)	(383)
Treasury shares repurchased under share repurchase program (note 20.1)	(50)	(75)
Effects associated with the Parent Company's convertible securities ¹	25	176
Treasury shares held by subsidiaries	(8)	(10)
\$	(2,724)	(2,472)

1 Represents the equity component upon the issuance of CEMEX, S.A.B. de C.V.'s convertible securities described in note 16.2, as well as the effects associated with such securities in connection with the change in the Parent Company's functional currency (note 2.4). Upon conversion of these securities, the balances have been correspondingly reclassified to common stock and/or additional paid-in capital (note 16.1).

For the years ended December 31, 2019, 2018 and 2017, the translation effects of foreign subsidiaries included in the statements of comprehensive income were as follows:

	2019	2018	2017
Foreign currency translation result ¹	\$ 88	(191)	328
Foreign exchange fluctuations from debt ²	19	120	(224)
Foreign exchange fluctuations from intercompany balances ³	(47)	(20)	(118)
	\$ 60	(91)	(14)

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

Other equity reserves - continued

- These effects refer to the result from the translation of the financial statements of foreign subsidiaries and include the changes in fair value of foreign exchange forward contracts designated as hedge of a net investment (note 16.4).
- 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 2.4).
- 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.

20.3) 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, 2019, the legal reserve amounted to \$95.

20.4) NON-CONTROLLING INTEREST AND PERPETUAL DEBENTURES

Non-controlling interest

Non-controlling interest represents the share of non-controlling stockholders in the equity and results of consolidated subsidiaries. As of December 31, 2019 and 2018, non-controlling interest in equity amounted to \$1,503 and \$1,572, respectively. In addition, in 2019, 2018 and 2017, non-controlling interests in consolidated net income were \$36, \$42 and \$75, respectively. These non-controlling interests arise mainly from the following CEMEX's subsidiaries:

- In February 2017, as described in note 4.1, CEMEX acquired a controlling interest in TCL, whose shares trade in the Trinidad and Tobago Stock Exchange. As of December 31, 2019 and 2018, there is a non-controlling interest in TCL of 30.17% of its common shares (see note 4.4 for certain relevant condensed financial information).
- In July 2016, CHP, a then indirect wholly owned subsidiary of CEMEX España, closed its initial offering of 2,337,927,954 common shares, or 45% of CHP's common shares. Pursuant to the repurchase of CHP's shares in the market during 2019, CEMEX's reduced the non-controlling interest in CHP from 45% in 2018 to 33.22% of CHP's outstanding common shares as of December 31, 2019. CHP's assets consist primarily of CEMEX's cement manufacturing assets in the Philippines (see note 4.4 for certain relevant condensed financial information).
- In November 2012, pursuant to a public offering in Colombia and an international private placement, CLH, a direct subsidiary of CEMEX España, concluded its initial offering of common shares. CLH's assets include substantially all of CEMEX's assets in Colombia, Panama, Costa Rica, Guatemala, El Salvador and until September 27, 2018 the operations in Brazil (note 4.2). As of December 31, 2019 and 2018, there is a noncontrolling interest in CLH of 26.83% and 26.78%, respectively, of CLH's outstanding common shares, excluding shares held in treasury (see note 4.4 for certain relevant condensed financial information).

Perpetual debentures

As of December 31, 2019 and 2018, the balances of the non-controlling interest included \$443 and \$444, respectively, representing the notional amounts of perpetual debentures, which exclude any perpetual debentures held by subsidiaries.

Coupon payments on the perpetual debentures was included within "Other equity reserves" and amounted to \$29 in 2019, \$29 in 2018 and \$25 in 2017, excluding in all the periods the coupons 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, 2019 and 2018, the detail of CEMEX's perpetual debentures, excluding the perpetual debentures held by subsidiaries, was as follows:

		2019	2018	Repurchase	
Issuer	Issuance date	Nominal amount	Nominal amount	option ¹	Interest rate
C10-EUR Capital (SPV) Ltd	May 2007	€ 64	€ 64	Tenth anniversary	EURIBOR + 4.79%
C8 Capital (SPV) Ltd	February 2007	\$135	\$135	Eighth anniversary	LIBOR + 4.40%
C5 Capital (SPV) Ltd	December 2006	\$61	\$61	Fifth anniversary	LIBOR + 4.277%
C10 Capital (SPV) Ltd	December 2006	\$175	\$175	Tenth anniversary	LIBOR + 4.71%

1 Under the 2017 Credit Agreement, CEMEX is not permitted to call these debentures.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

21) EXECUTIVE SHARE-BASED COMPENSATION

CEMEX has long-term restricted share-based compensation programs providing for the grant of the CEMEX's CPOs to a group of eligible executives, pursuant to which, according to CEMEX's election, either new CPOs are issued, or CEMEX provides funds to the administration trust owned by the executives for the purchase of a portion or all of the required CPOs in the market for delivery to such executives under each annual program over a service period of four years (the "Ordinary Program"). The Parent Company's CPOs of the annual grant (25% of each annual ordinary program) are placed at the beginning of the service period in the executives' accounts to comply with a one-year restriction on sale. Under the Ordinary Programs, the Parent Company issued new shares for 27.4 million CPOs in 2019, 49.3 million CPOs in 2018 and 53.2 million CPOs in 2017, that were subscribed and pending for payment in the Parent Company's treasury and in addition, 21.2 million CPOs in 2019, net of taxes settled in cash, required for delivery were acquired by the executives' trust in the market on behalf of such executives. As of December 31, 2019, there are 157.0 million CPOs associated with these annual programs that are required for delivery in the following years as the executives render services.

Beginning in 2017, with the approval of the Parent Company's Board of Directors, for a group of key executives, the conditions of the program were modified for new awards by reducing the service period from four to three years and implementing tri-annual internal and external performance metrics, which depending on their weighted achievement, may result in a final payment of the Parent Company's CPOs at the end of the third year between 0% and 200% of the target for each annual program (the "key executives program"). During 2019 and 2018, no CPOs of the Parent Company were issued or delivered under the key executives' program.

Beginning January 1, 2013, those eligible executives belonging to the operations of CLH and subsidiaries ceased to receive Parent Company's CPOs and instead started receiving shares of CLH, sharing significantly the same conditions of CEMEX's plan also over a service period of four years. During 2019, 2018 and 2017, CLH physically delivered 393,855 shares, 258,511 shares and 172,981 shares, respectively, corresponding to the vested portion of prior years' grants, which were subscribed and held in CLH's treasury. As of December 31, 2019, there are 1,584,822 shares of CLH associated with these annual programs that are expected to be delivered in the following years as the executives render services.

In addition, beginning in 2018, those eligible executives belonging to the operations of CHP and subsidiaries ceased to receive Parent Company's CPOs and instead started receiving shares of CHP, sharing significantly the same conditions of CEMEX's plan. During 2019 and 2018, CHP provided funds to a broker for the purchase of 4,961,130 and 871,189 CHP's shares in the market, respectively, on behalf and for delivery to the elegible executives.

The combined compensation expense related to the programs described above as determined considering the fair value of the awards at the date of grant in 2019, 2018 and 2017, was recognized in the operating results against other equity reserves or a cash outflow, as applicable, and amounted to \$32, \$34 and \$42, respectively, including in 2019 and 2018 the cost of CEMEX's CPOs and the CHP's shares, as correspond, acquired in the market on behalf of the executives. The weighted-average price per CEMEX CPO granted during the period was determined in pesos and was equivalent to \$0.6263 dollars in 2019, \$0.7067 dollars in 2018 and \$0.7563 dollars in 2017. Moreover, the weighted-average price per CLH share granted during the period as determined in Colombian pesos was equivalent to \$1.31 dollars in 2019, \$2.14 dollars in 2018 and \$3.90 dollars in 2017. As of December 31, 2019 and 2018, 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, CLH's shares and/or CHP's shares.

22) EARNINGS PER SHARE

Basic earnings per share is calculated by dividing net income 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 on the passage of time should be included in the determination of the basic weighted-average number of shares outstanding. Diluted earnings 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 lead 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.

The amounts considered for calculations of earnings per share in 2019, 2018 and 2017 were as follows:

	2019	2018	2017
Denominator (thousands of shares)			
Weighted-average number of shares outstanding ¹	45,393,602	45,569,180	43,107,457
Capitalization of retained earnings ¹	_	_	1,687,295
Effect of dilutive instruments – mandatorily convertible securities (note 16.2) 2	_	708,153	708,153
Weighted-average number of shares – basic	45,393,602	46,277,333	45,502,905
Effect of dilutive instruments – share-based compensation (note 21) ²	470,985	316,970	237,102
Effect of potentially dilutive instruments – optionally convertible securities (note 16.2) ²	1,457,554	1,420,437	2,698,600
Weighted-average number of shares – diluted	47,322,141	48,014,740	48,438,607

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements

As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Earnings per share - continued

Numerator Net income from continuing operations
Less: non-controlling interest net income
Controlling interest net income from continuing operations
Plus: after tax interest expense on mandatorily convertible securities
Controlling interest net income from continuing operations – for basic earnings per share calculations
Plus: after tax interest expense on optionally convertible securities
Controlling interest net income from continuing operations – for diluted earnings per
share calculations
Net income from discontinued operations
Basic earnings per share
Controlling interest basic earnings per share
Controlling interest basic earnings per share from continuing operations
Controlling interest basic earnings per share from discontinued operations
Controlling interest diluted earnings per share ³
Controlling interest diluted earnings per share
Controlling interest diluted earnings per share from continuing operations
Controlling interest diluted earnings per share from discontinued operations

- 1 The weighted-average number of shares outstanding in 2017 reflects the shares issued as a result of the capitalization of retained earnings approved by the general ordinary shareholders' meeting (the "Assembly") in such year. In 2019, the Assembly approved the delivery of a cash dividend, meanwhile, in 2018, the Assembly did not determine any cash dividend or capitalization of retained earnings in 2018 (note 20.1).
- 2 The number of Parent Company CPOs to be issued under the executive share-based compensation programs, as well as the total amount of Parent Company 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-based compensation programs is determined under the inverse treasury method.
- 3 For 2019, 2018 and 2017, the effects on the denominator and numerator of potential dilutive shares generate antidilution; therefore, there is no change between the reported basic earnings per share and diluted earnings per share.

23) COMMITMENTS

23.1) CONTRACTUAL OBLIGATIONS

As of December 31, 2019, CEMEX had the following contractual obligations:

	2019				
	Less than 1	1-3	3-5	More than	
Obligations	year	years	years	5 years	Total
Long-term debt\$	55	1,915	3,041	4,420	9,431
Leases 1	333	546	295	552	1,726
Convertible notes ²	520	=	=_		520
Total debt and other financial obligations ³	908	2,461	3,336	4,972	11,677
Interest payments on debt ⁴	469	870	720	471	2,530
Pension plans and other benefits ⁵	156	282	287	709	1,434
Acquisition of property, plant and equipment 6	155	30	1	3	189
Purchases of raw materials, fuel and energy 7	482	595	613	1,134	2,824
Total contractual obligations\$	2,170	4,238	4,957	7,289	18,654

- 1 Represent nominal cash flows. As of December 31, 2019, the NPV of future payments under such leases was \$1,404, of which, \$508 refers to payments from 1 to 3 years and \$254 refer to payments from 3 to 5 years.
- 2 Refers to the components of liability of the convertible notes described in note 16.2 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 long-term obligations for others of a similar nature.

(Millions of U.S. dollars)

Contractual obligations - continued

- 4 Estimated cash flows on floating rate denominated debt were determined using the floating interest rates in effect as of December 31, 2019.
- 5 Represents estimated annual payments under these benefits for the next 10 years (note 18), including the estimate of new retirees during such future years.
- 6 Refers mainly to the expansion of a cement-production line in the Philippines.
- 7 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 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.

23.2) OTHER COMMITMENTS

As of December 31, 2019 and 2018, CEMEX was party to other commitments for several purposes, including the purchase of fuel and energy, the estimated future cash flows over maturity of which are presented in note 23.1. A description of the most significant contracts is as follows:

- Beginning in April 2016, in connection with 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 overall electricity needs in Mexico for a period of 20 years. The estimated annual cost of this agreement is \$18 (unaudited) assuming that CEMEX receives all its energy allocation. Nonetheless, energy supply from wind is variable in nature and final amounts are determined considering the final MW per hour ("MWh") effectively received at the agreed prices per unit.
- On July 27, 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, for its overall electricity needs in Mexico CEMEX agreed with EURUS the purchase a portion of the electric energy generated 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 the Mexican state of Oaxaca. The estimated annual cost of this agreement is \$64 (unaudited) assuming that CEMEX receives all its energy allocation. Nonetheless, energy supply from wind source is variable in nature and final amounts will be determined considering the final MWh effectively received at the agreed prices per unit.
- CEMEX maintains a commitment initiated in April 2004 to purchase the energy generated by Termoeléctrica del Golfo ("TEG") until 2027 for its overall electricity needs in Mexico. The estimated annual cost of this agreement is \$113 (unaudited) assuming that CEMEX receives all its energy allocation. Nonetheless, final amounts will be determined considering the final MWh effectively received at the agreed prices per unit.
- In regards with the above, CEMEX also committed to supply TEG and another third-party electrical energy generating plant adjacent to TEG all fuel necessary for their operations until the year 2027, equivalent to approximately 1.2 million tons of petroleum coke per year. CEMEX covers its commitments under this agreement acquiring the aforementioned volume of fuel from sources in the international markets and Mexico.
- CEMEX Zement GmbH ("CZ"), CEMEX's subsidiary in Germany, held a long-term energy supply contract until 2023 with STEAG Industriekraftwerk Rüdersdorf GmbH ("SIKW") in connection with the overall electricity needs of CEMEX's Rüdersdorf plant. Based on the contract, each year CZ has the option to fix in advance the volume of energy in terms of MW that it will acquire from VEN SIKW, with the option to adjust the purchase amount one time on a monthly and quarterly basis. The estimated annual cost of this agreement is \$18 (unaudited) assuming that CEMEX receives all its energy allocation.
- On October 24, 2018, CEMEX, S.A.B. de C.V. entered into an energy financial hedge agreement in Mexico, commencing October 1, 2019 and for a period of 20 years. Trough the aforementioned contract, the Company fixed the megawatt-hour cost over an electric energy volume of 400 thousand megawatts per year, through the payment of US\$25.375 price per megawatt hour of electric power in exchange for a market price. The committed price to pay will increase 1.5% annually. The differential between the agreed price and the market price is settled monthly. CEMEX considers this agreement as a hedge for a portion of its aggregate consumption of electric energy in Mexico and recognizes the result of the exchange of price differentials described previously in the Income Statement as a part of the costs of energy. During 2019, the Company received \$1.1. CEMEX, S.A.B. de C.V. does not record this agreement at fair value due to the fact that there is not a deep market for electric power in Mexico that would effectively allow for its valuation.

23.3) 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, 2019, 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 550 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, CEMEX believes this scenario is remote. The amount expensed through self-insured health care benefits was \$62 in 2019, \$62 in 2018 and \$64 in 2017.

(Millions of U.S. dollars)

24) LEGAL PROCEEDINGS

24.1) PROVISIONS RESULTING FROM LEGAL PROCEEDINGS

CEMEX is involved in various significant legal proceedings, the resolutions of which are deemed probable and imply the incurrence of losses and/or cash outflows or the delivery of other resources owned by CEMEX. As a result, certain provisions and/or losses have been recognized in the financial statements, representing the best estimate of cash outflows. Therefore, CEMEX believes that it will not make significant expenditure or incur significant losses in excess of the amounts recorded. As of December 31, 2019, the details of the most significant events giving effect to provisions or losses are as follows:

- On December 11, 2017, in the context of a market investigation opened in 2013 against five cement companies and 14 executives of those companies, including two former executives of CEMEX Colombia for purported practices that limited free competition, and after several processes over the years, the Colombian Superintendence of Industry and Commerce (Superintendencia de Industria y Comercio or the "SIC") imposed a final fine to CEMEX Colombia for an amount equivalent to \$25. As a result, CEMEX Colombia recognized a provision for this amount against "Other expenses, net" in 2017. This fine was paid on January 5, 2018. On June 7, 2018, CEMEX Colombia filed a motion for annulment and reestablishment of right before the Administrative Court seeking for the annulment of the charges brought forth by the SIC and the restitution of the fine paid, with any adjustments provided by Colombian Law. This claim could take up to six years to be resolved. As of December 31, 2019, CEMEX is not able to assess the likelihood for the recovery of the fine imposed by the SIC.
- In January 2007, the Polish Competition and Consumers Protection Office (the "Protection Office") initiated an antitrust proceeding against all cement producers in the country, including CEMEX Polska Sp. Z.o.o. ("CEMEX Polska") and another subsidiary in Poland, arguing 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. 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. After several appeals filed against the Protection Office's fine before the relevant courts, in March 2018, CEMEX Polska's fine was reduced from an amount in Polish Zloty equivalent to \$31 in 2009 to a final amount equivalent to \$18. This amount was paid in 2018. On November 19, 2018, CEMEX Polska filed an appeal before the Polish Supreme Court against the Appeal Court's judgment seeking the reduction of the imposed fine, which was accepted by the Polish Supreme Court on August 8, 2019, as well as appeals of the Protection Office and those of other cement producers. A resolution by the Polish Supreme Court is expected during 2020. As of December 31, 2019, CEMEX is not able to assess the likelihood for the recovery of a portion of the fine imposed by the Protection Office.
- As of December 31, 2019, CEMEX had accrued environmental remediation liabilities through its subsidiaries 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 pounds sterling equivalent to \$174. Expenditure was assessed and quantified over the period in which the sites have the potential to cause environmental harm, which is generally consistent with the views taken 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, 2019, CEMEX had accrued environmental remediation liabilities through its subsidiaries in the United States for \$63, 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. CEMEX 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.
- In 2012, in connection with a contract entered into in 1990 (the "Quarry Contract") by CEMEX Granulats Rhône Méditerranée ("CEMEX GRM"), one of CEMEX's subsidiaries in France, with SCI La Quinoniere ("SCI") pursuant to which CEMEX GRM had drilling rights 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 such contract and damages plus interest for a revised amount in euros equivalent to \$75, arguing that CEMEX GRM partially filled the quarry allegedly in breach of the terms of the Quarry Contract. After many hearings, resolutions and appeals over the years, on March 13, 2018, the court of appeals issued an enforceable resolution ordering the rescission of the Quarry Contract and designated a judicial expert to: a) determine the volume of both excavated and backfilling materials, and b) give his opinion on the potential damages suffered by SCI, a process that is expected to end by February 28, 2020. CEMEX GRM appealed this resolution with the court of cassation, which on May 23, 2019 dismissed such appeal. As of December 31, 2019, CEMEX had accrued a provision through its subsidiaries in France for \$8 in connection with the best estimate of the remediation costs resulting from this claim. Altough the final amount may difer, CEMEX considers that any such amount should not have a material adverse impact on CEMEX's results of operations, liquidity and financial condition.

24.2) 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. Nonetheless, until all stages in the procedures are exhausted in each proceeding, CEMEX cannot assure the achievement of a final favorable resolution. As of December 31, 2019, 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:

CEMEX, S.A.B. DE C.V. AND SUBSIDIARIES Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017 (Millions of U.S. dollars)

Contingencies from legal proceedings - continued

- On September 20, 2018, triggered by heavy rainfall, a landslide causing damages and fatalities (the "Landslide") occurred in a site located within an area covered by mining rights of APO Land & Quarry Corporation ("ALQC") in Naga City, Cebu, Philippines. ALQC is a principal raw material supplier of APO Cement Corporation ("APO"), a wholly owned subsidiary of CHP. CEMEX indirectly owns a minority 40% stake in ALQC. On November 19, 2018, CHP and APO were served summons concerning an environmental class action lawsuit filed by 40 individuals and one legal entity (on behalf of 8,000 individuals allegedly affected by the Landslide) at the Regional Trial Court (the "Court") of Talisay, Cebu, against CHP, ALOC, APO, the Mines and Geosciences Bureau of the Department of Environment and Natural Resources, the City Government of Naga, and the Province of Cebu. In the complaint, (i) among other allegations, plaintiffs claim that the Landslide occurred as a result of the defendants' gross negligence; and (ii) seek, among other relief, (a) monetary damages for an amount in Philippine Pesos equivalent to \$85, (b) the establishment of a rehabilitation fund for an amount in Philippine Pesos equivalent to \$10, and (c) the issuance of a Temporary Environment Protection Order against ALQC aiming to prevent ALQC from performing further quarrying activities while the case is still pending. This last request was rejected by the Court on August 16, 2019. Moreover, on September 30, 2019 the Court dismissed the case against CHP and APO, order that is not yet final and that was appealed by the plaintiffs on November 26, 2019. As of December 31, 2019, CHP, APO and ALOC (collectively, the "Private Defendants") hold and will defend its position that the Landslide occurred due to natural causes and deny any liability. In the event that the latter order is reconsidered, and a final adverse resolution is issued in this matter, plaintiffs will have the option to proceed against any one of ALQC, APO or CHP for satisfaction of the entirety of the potential judgement award, without the need to proceed against any other Private Defendant beforehand. Thus, ALQC's, APO's or CHP's assets alone could be exposed to execution proceedings. As of December 31, 2019, because of the status and preliminary stage of the lawsuit, CEMEX is not able to assess with certainty the likelihood of an adverse result in this lawsuit; and, CEMEX is neither able to assess if a final adverse result in this lawsuit would have a material adverse impact on its results of operations, liquidity and financial position.
- On June 12, 2018, the Authority for Consumer Protection and Competition Defense of Panama (the "Panama Authority") carried out an investigation against Cemento Bayano and other competitors for the alleged commission of monopolistic practices in relation to the gray cement and the readymix concrete markets. From this investigation, the Panama Authority considered the possible existence of monopolistic or anticompetitive practices consisting of: (i) price fixing and/or production restriction of gray cement sold to ready-mix concrete producers in Panama; and (ii) unilateral and/or joint predatory acts and/or cross subsidies in the ready-mix concrete market. In October 2018, the Panama Authority notified Cemento Bayano of a new information request in order to continue their investigation and confirm if there were violations to the law. In February 2019, Cemento Bayano finalized the delivery to the Panama Authority of the required information and documentation. Cemento Bayano considers it did not commit unlawful acts and is fully cooperating with the Panama Authority. As of December 31, 2019, Cemento Bayano has delivered all required information and the Panama Authority is analyzing the collected information. Considering the available judgment elements, CEMEX is not able to assess if this investigation will lead to any fines, penalties or remedies, or if such fines, penalties or remedies, if any, would have a material adverse effect on the Company's results of operations, liquidity or financial position.
- Certain of CEMEX's subsidiaries in the United States were notified of a grand jury subpoena dated March 29, 2018 issued by the United States Department of Justice ("DOJ") related to an investigation of possible antitrust law violations in connection with CEMEX's sales (and related sales practices) of gray Portland cement and slag in the United States and its territories. The objective of this subpoena is to gather facts necessary to make an informed decision about whether violations of U.S. law have occurred. CEMEX has been cooperating with the DOJ and is complying with the subpoena. As of December 31, 2019, given the status of the investigation, CEMEX is not able to assess if this investigation will lead to any fines, penalties or remedies, or if such fines, penalties or remedies, if any, would have a material adverse effect on the Company's results of operations, liquidity or financial position.
- On March 16, 2018, a putative securities class action complaint was filed against the Parent Company and one of our members of the board of directors whom is also officer (the CEO) and other officer (the CFO) in the U.S. District Court for the Southern District of New York, on behalf of investors who purchased or otherwise acquired Parent Company's securities between August 14, 2014 to March 13, 2018, inclusive. The complaint alleged violations are based in that press releases and filings to the United States Securities and Exchange Commission ("SEC") that included materially false and misleading statements in connection with alleged misconduct relating to the Maceo Project and the potential regulatory or criminal actions that might arise as a result of such deficiencies. On July 12, 2019, the Judge granted CEMEX's motion to dismiss the action but permitted plaintiffs an opportunity to re-plead. On August 1, 2019, plaintiffs filed an amended complaint, based on the same alleged violations, but changing the relevant class period that now starts on April 23, 2015 (before it was August 14, 2014) and including CLH as defendant in addition to CEMEX, S.A.B de C.V. All of the defendants moved to dismiss the action on September 5, 2019 and the plaintiffs filed an apposition brief on October 11, 2019 which was replied by the defendants on November 1, 2019. As of December 31, 2019, CEMEX is not able to assess the likelihood of an adverse result considering the current status and preliminary nature of this lawsuit, or if a final adverse result in this lawsuit would have a material adverse effect on the Company's results of operations, liquidity or financial position.
- In December 2016, the Parent Company 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 the Parent Company or any of its affiliates violated the law. The Parent Company has been cooperating with the SEC and intends to continue cooperating fully with the SEC. The DOJ also opened an investigation into this matter. In this regard, on March 12, 2018, the DOJ issued a grand jury subpoena to the Parent Company relating to its operations in Colombia and other jurisdictions. The Parent Company intends to cooperate fully with the SEC, the DOJ and any other investigatory entity. As of December 31, 2019, the Parent Company is unable to predict the duration, scope, or outcome of either the SEC investigation or the DOJ investigation, or any other investigation that may arise, or, because of the current status of the SEC investigation and the preliminary nature of the DOJ investigation, the potential sanctions which could be borne by the Parent Company, or if such sanctions, if any, would have a material adverse impact on CEMEX results of operations, liquidity or financial position.

(Millions of U.S. dollars)

Contingencies from legal proceedings - continued

- In February 2014, the Egyptian Tax Authority requested Assiut Cement Company ("ACC"), a subsidiary of CEMEX in Egypt, the payment of a development levy on clay used in the Egyptian cement industry for an amount equivalent as of December 31, 2019 to \$20 for the period from May 5, 2008 to November 30, 2011. In March 2014, ACC appealed the levy and on September 2014 it was notified that it obtained a favorable resolution from the Ministerial Committee for Resolution of Investment Disputes, which instructed the Egyptian Tax Authority to cease claiming from 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. Nonetheless, in May 2016, the Egyptian Tax Authority challenged ACC's right to cancel the levy on clay before the North Cairo Court, which referred the cases to Cairo's Administrative Judiciary Court. These cases have been adjourned by the Commissioners of the Cairo Administrative Judiciary Court to January 20, 2020 until the request submitted to the Committee for Resolution of Tax Disputes is resolved. CEMEX does not expect that such referral will prejudice ACC's favorable legal position in this dispute. As of December 31, 2019, CEMEX does not expect a material adverse impact due to this matter in its results of operations, liquidity or financial position.
- In September 2012, in connection with a lawsuit submitted to a first instance court in Assiut, Egypt in 2011, the first instance court of Assiut issued a resolution in order to nullify the Share Purchase Agreement (the "SPA") pursuant to which CEMEX acquired in 1999 a controlling interest in Assiut Cement Company. In addition, during 2011 and 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. After several appeals, hearings and resolutions over the years, the cases are held in Cairo's 7th Circuit State Council Administrative Judiciary Court awaiting the High Constitutional Court to pronounce in regard to the challenges against the constitutionality of Law 32/2014 filed by the plaintiffs, which protects CEMEX's investments in Egypt. These matters are complex and take several years to be resolved. As of December 31, 2019, 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 connection with the legal proceedings presented in notes 24.1 and 24.2, the exchange rates as of December 31, 2019 used by CEMEX to convert the amounts in local currency to their equivalents in dollars were the official closing exchange rates of 3.79 Polish zloty per dollar, 0.8917 Euro per dollar, 0.7550 British pounds sterling per dollar and 16.0431 Egyptian pounds per dollar.

In addition to the legal proceedings described above in notes 24.1 and 24.2, as of December 31, 2019, 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, administrative, commercial and lawless 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.

24.3) OTHER SIGNIFICANT PROCESSES

In connection with the cement plant located in the municipality of Maceo in Colombia, as described in note 14.1, as of December 31, 2019, the plant has not initiated commercial operations considering several significant processes for the profitability of the investment. The evolution and status of the main issues related to such plant are described as follows:

Memorandums of understanding

• In August 2012, CEMEX Colombia signed a memorandum of understanding (the "MOU") with the representative of the entity CI Calizas y Minerales S.A. ("CI Calizas"), for the acquisition and transfer of assets mainly comprising land, the mining concession and the shares of Zona Franca Especial Cementera del Magdalena Medio S.A.S. ("Zomam") (holder of the free trade zone concession). In addition, in December 2013, CEMEX Colombia engaged the same representative of CI Calizas to also represent in the name and on behalf of CEMEX Colombia in the acquisition of certain land adjacent to the plant, signing a new memorandum of understanding (the "Land MOU"). Under the MOU and the Land MOU, CEMEX Colombia made cash advances to this representative for amounts in Colombian Pesos equivalent to approximately \$13.4 million of a total of approximately \$22.5 million, and paid interest accrued over the unpaid committed amount for approximately \$1.2 million. These amounts considering the exchange rate as of December 31, 2016 of 3,000.75 Colombian Pesos per U.S. Dollar. In September 2016, after confirming irregularities in the acquisition processes by means of investigations and internal audits initiated in response to complaints received, which were reported to Colombia's Attorney General (the "Attorney General"), providing the findings obtained, and considering that such payments were made in breach of the Parent Company's and CLH's policies, the Company decided to terminate the employment relationship with then those responsible for the Planning and Legal areas and accepted the resignation of the then Chief Executive Officer. Moreover, as a result of the findings and considering the available legal opinions as well as the low likelihood of recovering those advances, in December 2016, CEMEX Colombia write off such advances from its investments in progress (note 14.1) and cancelled the remaining advance payable.

(Millions of U.S. dollars)

Expiration of property process and other related matters

• After the signing of the MOU, in December 2012, 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 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, including the shares of Zomam acquired by CEMEX Colombia before the beginning of such process. As a third party acting in good faith and free of guilt, CEMEX Colombia joined the expiration of property process fully cooperating with the Attorney General. As of December 31, 2019, it is estimated that a final resolution in the ongoing expiration of property process, under which is about to begin the evidentiary phase, may take between 10 and 15 years from its beginning. As of December 31, 2019, pursuant to the expiration of property process of the assets subject to the MOU and the failures to legally formalize the purchases under the Land MOU, CEMEX Colombia does not have the legal representation of Zomam, is not the rightful owner of the land and is not the assigned entity of the mining concession.

In addition, there is an ongoing criminal investigation that resulted in a legal resolution by means of which an indictment was issued to two of the Company's former officers and to CI Calizas' representative. CEMEX is not able to anticipate the actions that criminal judges may impose against these people.

Lease contract, mandate agreement and operation contract

- In July 2013, CEMEX Colombia signed with the provisional depository designated by the former Drugs National Department (then depository of the assets subject to the expiration of property process), 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 by means of which CEMEX Colombia was duly authorized to build and operate the plant (the "Lease Contract"). Moreover, in 2014, the provisional depository granted a mandate (the "Mandate") to CEMEX Colombia for an indefinite period for the same purpose of continuing the construction and operation of the plant. On July 15, 2018, the aforementioned Lease Contract expired.
- On April 12, 2019, CEMEX Colombia, CCL and another of its subsidiaries reached a conciliatory agreement with the SAE and CI Calizas before the Attorney General's Office and signed a contract of Mining Operation, Manufacturing and Delivery Services and Leasing of Properties for Cement Production (the "Operation Contract"), which will allow CEMEX Colombia to continue using the assets subject to the aforementioned expiration of property process for an initial term of 21 years that can be renewed for 10 additional years, provided that the extension of the mining concession is obtained. The Operation Contract was signed by CI Calizas and Zomam with the authorization of the SAE as delegate of these last two companies, considering the following terms:
 - As consideration for entering into the agreement, CEMEX Colombia and /or a subsidiary will pay to CI Calizas and Zomam the following amounts in Colombian Pesos equivalent: a) an annual payment of \$15 to CI Calizas for the use of land that will be adjusted annually for changes in the Consumer Price Index; b) a single payment for the rental of the aforementioned land from July 2013 to the signing date, based on the agreed upon rental amounts, reducing the lease payments made by CEMEX Colombia prior to the signing of the Operation Contract; c) an additional single payment in Colombian Pesos equivalent to \$305 already paid for considerations not received during the negotiations of the Operation Contract; and d) a payment for the limestone extracted to date for an amount in Colombian Pesos equivalent to \$1 million payable in two installments, the first already paid and the second a year after the signing of the Operation Contract.
 - Once the Maceo Plant begins commercial operations, CEMEX Colombia and/or a subsidiary will pay on a quarterly basis: a) 0.9% of the net sales resulting from the cement produced in the plant as compensation to CI Calizas for the right of CEMEX Colombia to extract and use the mineral reserves; and b) 0.8% of the net sales resulting from the cement produced in the plant as payment to Zomam for cement manufacturing and delivery services, as long as Zomam maintains the Free Zone benefit, or, 0.3% of the aforementioned net sales exclusively for the use of equipments, in case that Zomam losses the benefits as Free Trade Zone.
- The Operation Contract will continue in force regardless of the result in the expiration of property process, except that the applicable criminal judge
 would recognize ownership rights of the assets under expiration of property to CEMEX Colombia and its subsidiary, in which case the Operation
 Contract would no longer be needed and would be early terminated.

Under the presumption that CEMEX Colombia conducted itself in good faith, CEMEX considers that it will be able to keep ownership of the plant, and that the rest of its 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. Nonetheless, had this not be the case, CEMEX Colombia would take all necessary actions to safeguard its rights. In the event that the expiration of property over the assets subject to the MOU is ordered in favor of the State, if the assets were adjudicated to a third party in a public tender offer, considering the signing of the Operation Contract, such third party would have to subrogate to the Operation Contract. As of December 31, 2019, CEMEX is not able to estimate whether the expiration of property over the assets subject to the MOU will be ordered in favor of the State, or, if applicable, if the assets would be adjudicated to a third party in a public tender offer.

(Millions of U.S. dollars)

Status in connection with the commissioning of the plant

On September 3, 2019, CEMEX Colombia was notified of the resolution issued by Corantioquia's Directive Council, the regional environmental authority, regarding to the approval for the subtraction from the Integrated Management District ("IMD") of the Canyon of the Alicante River of 169.2 hectares corresponding to the surface of the Maceo Plant. As of December 31, 2019, after the signing of the Operation Contract and the subtraction of the plant's surface from the IMD, the commissioning of the Maceo plant and the conclusion of the access road remain suspended until favorable resolutions would be obtained in other significant procedures in process with the respective authorities to guarantee the commissioning of the plant, such as: a) modify the land use where the project is located to harmonize it with industrial and mining use; b) modify the environmental license to expand the extraction capacity of limestone, essential raw material for the production of cement, up to 990 thousand tons per year; and c) obtaining several permits for the conclusion of the access road. CEMEX Colombia continues to work to address these issues as soon as possible and limits its activities to those on which it has the relevant authorizations. As of December 31, 2019, CEMEX continues working intensively in the necessary processes for the commissioning of the plant, nonetheless, at this date, the Company cannot provide a precise date for the plant's startup.

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, due 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.

For the years ended December 31, 2019, 2018 and 2017, in ordinary course of business, CEMEX has entered into transactions with related parties for the sale and/or purchase of products, sale and/or purchase of services or the lease of assets, all of which are not significant for CEMEX and to the best of CEMEX's knowledge are not significant to the related party, are incurred for non-significant amounts for CEMEX and are executed under market terms and conditions following the same commercial principles and authorizations applied to other third parties. These identified transactions, as applicable, are approved or ratified at least annually by the Parent Company's Board of Directors. For CEMEX, none of these transactions are material to be disclosed separately.

In addition, for the years ended December 31, 2019, 2018 and 2017, the aggregate amount of compensation of CEMEX, S.A.B. de C.V. Board of Directors, including alternate directors, and CEMEX's top management executives was \$40, \$38 and \$47, respectively. Of these amounts, \$34 in 2019, \$29 in 2018, \$35 in 2017, were paid as base compensation plus performance bonuses, including pension and post-employment benefits. In addition, \$6 in 2019, \$9 in 2018 and \$12 in 2017 of the aggregate amounts in each year, corresponded to allocations of Parent Company CPOs under CEMEX's executive share-based compensation programs.

26) SUBSEQUENT EVENTS

On January 8, 2020, in connection with the assets held for sale in the United Kingdom (note 4.2), CEMEX announced that one of its subsidiaries signed an agreement for the sale of such assets to Breedon Group plc, for a total consideration of \$235, which includes approximately \$31 of debt. Furthermore, on January 20, 2020, the Competition and Markets Authority (the "CMA") served an initial enforcement order on Breedon Group plc, Breedon Southern Limited and CEMEX Investments Limited in relation to the proposed acquisition of a portfolio of assets by Breedon Group plc from CEMEX Investments Limited. The initial enforcement requires both companies to operate separately while the CMA reviews the deal. CEMEX expects to finalize this divestment during the second quarter of 2020.

On January 8, 2020, in connection with the tax proceeding related to the year 2012 in Colombia, CEMEX Colombia was notified of the resolution that concludes the reconsideration request in which, the Tax Authority confirmed the official settlement in all respects. CEMEX Colombia has a period of fourth months to appeal this resolution before the administrative courts. Notwithstanding this resolution, in this stage of the proceeding, CEMEX considers that an adverse resolution in this proceeding after conclusion of all available defense procedures is not probable, however, it is difficult to assess with certainty the likelihood of an adverse result in the proceeding; but if adversely resolved, CEMEX believes this proceeding could have a material adverse impact on the operating results, liquidity or financial position of CEMEX.

Notes to the Consolidated Financial Statements As of December 31, 2019, 2018 and 2017

(Millions of U.S. dollars)

27) MAIN SUBSIDIARIES

As mentioned in notes 4.4 and 20.4, as of December 31, 2019 and 2018, there are non-controlling interests on certain consolidated entities that are in turn holding companies of relevant operations. The main subsidiaries as of December 31, 2019 and 2018, which ownership interest is presented according to the interest maintained by CEMEX, were as follows:

_		% Int	erest
Subsidiary	Country	2019	2018
CEMEX México, S. A. de C.V. 1	Mexico	_	100.0
CEMEX España, S.A. ²	Spain	99.9	99.9
CEMEX, Inc.	United States of America	100.0	100.0
CEMEX Latam Holdings, S.A. ³	Spain	73.2	73.2
CEMEX (Costa Rica), S.A.	Costa Rica	99.2	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	99.7	99.9
Cemento Bayano, S.A. 5	Panama	100.0	100.0
CEMEX Dominicana, S.A.	Dominican Republic	100.0	100.0
Trinidad Cement Limited	Trinidad and Tobago	69.8	69.8
Caribbean Cement Company Limited 6	Jamaica	79.0	79.0
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, Inc. ⁷	Philippines	66.8	55.0
Solid Cement Corporation 7	Philippines	100.0	100.0
APO Cement Corporation 7	Philippines	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 8	United Arab Emirates	100.0	100.0
Neoris N.V. 9	The Netherlands	99.8	99.8
CEMEX International Trading LLC 10	United States of America	100.0	100.0
Transenergy, Inc. 11	United States of America	100.0	100.0

- Effective among the participants beginning December 1, 2019, the corporate reorganization approved on November 13, 2019 was formalized, by means of which, CEMEX, S.A.B. de C.V. merged and absorbed CEMEX México, S.A. de C.V. and Empresas Tolteca de México, S.A. de C.V., among other Mexican subsidiaries merged by the Parent Company as part of the aforementioned reorganization. The merge of CEMEX México, S.A. de C.V. and Empresas Tolteca de México, S.A. de C.V. was registered in the Public Registry of Commerce in Monterrey on December 12, 2019 and November 26, 2019, respectively, and both will be effective with third-parties three months after such applicable date.
- 2 CEMEX España is the indirect holding company of most of CEMEX's international operations.
- 3 The interest reported excludes own shares held in CLH's treasury. CLH, incorporated in Spain, trades its ordinary shares in the Colombian Stock Exchange under the symbol CLH, and is the indirect holding company of CEMEX's operations in Colombia, Panama, Costa Rica, Guatemala, Nicaragua and El Salvador (note 20.4).
- 4 Represents CEMEX's direct and indirect interest of 99.74% and 98.93% interest in ordinary and preferred shares, respectively. The interest reported excludes shares held in CEMEX Colombia, S.A.'s treasury.
- 5 Includes a 0.515% interest held in Cemento Bayano's treasury.
- 6 Represents the aggregate ownership interest of CEMEX in this entity of 79.04%, which includes TCL's direct and indirect 74.08% interest.
- 7 Represents CHP direct and indirect interest. CEMEX's operations in the Philippines are conducted through CHP, subsidiary incorporated in the Philippines which since July 2016 trades its ordinary shares on the Philippines Stock Exchange under the symbol CHP (note 20.4).
- 8 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.
- 9 Neoris N.V. is the holding company of the entities involved in the sale of information technology solutions and services.
- 10 CEMEX International Trading, LLC is involved in the international trading of CEMEX's products.
- 11 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.



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Independent auditors' report

To the Board of Directors and Stockholders

CEMEX, S.A.B. de C.V.

Opinion

We have audited the consolidated financial statements of CEMEX, S.A.B. de C.V. and subsidiaries ("the Group"), which comprise the consolidated statements of financial position as at December 31, 2019 and 2018, the consolidated income statements, statements of comprehensive income (loss), changes in stockholders' equity and cash flows for the years ended December 31, 2019, 2018 and 2017, and notes to the consolidated financial statements, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2019 and 2018, and its consolidated financial performance and its consolidated cash flows for the years ended December 31, 2019, 2018 and 2017 in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Mexico, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

We draw attention to Note 2.1 of the consolidated financial statements, which describes the effects of a change in the presentation currency of the Group. Our opinion is not modified in respect of this matter.



Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Evaluation of the goodwill impairment analysis for certain cash-generating units

The key audit matter

As discussed in note 15.2 to the consolidated financial statements, the goodwill balance as of December 31, 2019 was \$9,562 million, of which \$7,469 million related to the United States of America (USA) cash-generating unit (CGU), \$494 million to the Spanish CGU, and \$296 million to the Colombian CGU. The goodwill balance represented 33% of the Group's total consolidated assets as of December 31, 2019.

We identified the evaluation of the goodwill impairment analysis for these three CGUs as a key audit matter because the estimated fair value involved a high degree of subjectivity. Specifically, the long-term growth rate and the discount rate assumptions used to calculate the fair value of the CGUs are complex and minor changes to these assumptions have a significant effect on the Group's discounted cash flow forecasts.

How the matter was addressed in our audit

The primary procedures we performed to address this key audit matter included the following:

We performed sensitivity analyses over the longterm growth rate and the discount rate assumptions to assess their impact on the determination of the fair value of the USA, Spanish and Colombian CGUs.

We evaluated the Group's forecasted long-term growth rates for these CGUs by comparing the growth assumptions to publicly available data.

We compared the Group's historical cash flow forecasts to actual results to assess the Group's ability to accurately forecast. In addition, we involved our valuation specialists, who assisted in:

- Evaluating the discount rate used in the valuation, by comparing it with a discount rate range that was independently developed using publicly available data for comparable entities;
- Developing an estimate of the USA, Spanish and Colombian CGUs' fair value using the Group's cash flow forecasts and determining an independently developed discount rate, and comparing the results of our estimates to the Group's fair value estimates.



Evaluation of certain tax and legal contingencies

The key audit matter

As discussed in notes 19.4 and 24 to the consolidated financial statements, the Group is involved in certain tax and legal proceedings in Mexico (Corporate), Spain, Egypt and Colombia. The Group records provisions for these proceedings when it is probable that an outflow of resource will be required to settle a present obligation and when the outflow can be estimated. The Group discloses a contingency whenever the likelihood of loss from the proceedings is considered possible or when it is considered probable but it is not possible to estimate the amount of the outflow.

We identified the evaluation of certain tax and legal proceedings and the related provisions recognized and/or disclosures made as a key audit matter because it requires significant judgment and effort. This is specifically due to the nature of the estimates and assumptions, including judgments about the likelihood of loss and the amounts that would be paid in the event of loss.

How the matter was addressed in our audit

The primary procedures we performed to address this key audit matter included the following:

We evaluated the competence and capabilities of the internal and external specialists of the Group that assessed the likelihood of loss and the estimate of the outflow of resources.

In addition, we assessed the amounts recorded and/or disclosed by:

- Reading letters received directly from the Group's external and internal specialists that evaluated and quantified the Group's probable or reasonably possible monetary exposure to the tax and legal proceedings;
- For certain tax and legal proceedings, we compared these assessments and estimates to those made by the Group and evaluated the sufficiency of the Group's tax and legal contingency disclosures; and
- Reading the latest correspondence between the Group and the various tax authorities or plaintiffs and internal and external specialists of the Group, where applicable.

We also involved our tax and legal specialists, who assisted in evaluating the conclusions reached by the Group.

We assessed that the disclosures reflect the underlying facts and circumstances of each tax and legal proceeding.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended December 31, 2019, to be filed with the National Banking and Securities Commission (Mexico) (Comisión Nacional Bancaria y de Valores) and the Mexican Stock Exchange (Bolsa Mexicana de Valores) ("the Annual Report") but does not include the consolidated financial statements and our auditors' report thereon. The Annual Report is expected to be made available to us after the date of this auditors' report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.



In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the Annual Report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. 'Reasonable assurance' is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.



- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

C.P.C. Joaquín Alejandro Aguilera Dávila

KPMG Cárdenas Dosal, S.C. Monterrey, N.L. February 5, 2020