

ZURICH, SWITZERLAND, APRIL 28, 2020

Q1 2020 results

COVID-19 impacts results; weighs on outlook

- Orders \$7.3 billion, -4%; comparable +1%
- Revenues \$6.2 billion, -9%; comparable -7%¹
- Income from operations \$373 million; margin 6.0%
- Operational EBITA¹ \$636 million; margin¹ 10.2%, including 30 basis points stranded costs
- Net income \$376 million, -30%
- Basic EPS \$0.18, -30%²; operational EPS¹ \$0.30, -2%
- Cash flow from operating activities -\$577 million

"The COVID-19 pandemic impacted our first quarter results, lowering revenues and operating margins in all our businesses, although order growth held up well. We are doing our utmost to ensure the health and safety of our employees while maintaining business continuity, serving our customers and continuing to invest in R&D for the long-term," said Björn Rosengren, CEO of ABB.

"In the second quarter, we expect ABB's operations to be significantly challenged by a sharp drop in demand due to lockdowns in many parts of the world. Nevertheless, we will accelerate our efforts to manage our costs and safeguard liquidity, while moving ahead with decentralizing the group and our target to complete the divestment of Power Grids at the end of the second quarter."

KEY FIGURES		CHANGE		
(\$ millions, unless otherwise indicated)		Q1 2020	Q1 2019	US\$ Comparable
Orders		7,346	7,613	-4% +1%
Revenues		6,216	6,847	-9% -7%
Income from operations		373	590	-37%
Operational EBITA ¹		636	766	-17% -16% ³
as % of operational revenues		10.2	11.2	-1.0 pts
Income from continuing operations, net of tax		326	415	-21%
Net income attributable to ABB		376	535	-30%
Basic EPS (\$)		0.18	0.25	-30% ²
Operational EPS (\$) ¹		0.30	0.30	-2% ² -1% ²
Cash flow from operating activities ⁴		(577)	(256)	-125%

On December 17, 2018, ABB announced an agreed sale of its Power Grids business. Consequently, the results of the Power Grids business are presented as discontinued operations.

¹For a reconciliation of non-GAAP measures, see "supplemental reconciliations and definitions" in the attached Q1 2020 Financial Information.

²EPS growth rates are computed using unrounded amounts. Comparable operational earnings per share is in constant currency (2019 exchange rates not adjusted for changes in the business portfolio).

³Constant currency (not adjusted for portfolio changes).

⁴Amount represents total for both continuing and discontinued operations.

Summary

Against the backdrop of COVID-19, orders for the first quarter remained robust, with Motion and Industrial Automation both benefiting from strong large orders. However, revenues declined in all businesses, reflecting a drop in product demand due to the pandemic, at first in China, and then across other parts of the world, with mobility restrictions also constraining system installation and services activities. These developments, in turn, weighed on operating margins in all businesses, reflecting that certain costs remain essential for business continuity.

Orders

Orders were 4 percent lower (up 1 percent comparable) in the quarter compared to the prior year period. Foreign exchange translation effects had a net negative impact of 3 percent and portfolio changes a net negative impact of 2 percent. The order backlog was 1 percent lower (up 8 percent comparable) at the end of the quarter.

Regional overview

- Orders from Europe were 1 percent higher (5 percent comparable), supported by large orders. At the country level, performance was mixed. Sweden, Norway, the Netherlands and the UK were strong, but in Germany, Switzerland, Italy and Spain, where COVID-19 impacted earlier, orders declined when compared to the prior year period. In Germany, orders were 7 percent lower (4 percent comparable).
- Orders from the Americas were steady (up 2 percent comparable), reflecting the later onset of COVID-19 in the region. Orders from the United States were 2 percent higher (up 2 percent comparable).
- In Asia, Middle East and Africa (AMEA), orders were 12 percent lower (7 percent comparable). Orders from India, South Korea, Thailand and Indonesia advanced well while orders from Australia, Singapore and Japan fell back. In China, where the impacts of COVID-19 materialized first, orders declined 21 percent (16 percent comparable).

End-market overview

- In discrete industries, orders were disrupted in most end-markets, while orders from automotive and automotive-sector related industries were materially lower.
- In process industries, ABB saw solid demand from customers in the mining and pulp & paper segments. Unconventional oil & gas and conventional power generation remained challenged.
- In transport & infrastructure, investments were robust, with strong growth in ports, rail and water & wastewater, as well as good order growth in distribution utilities.
- Buildings market activity eased as construction companies faced increased constraints to activities from quarantine efforts.

Revenues

Revenues were 9 percent lower (7 percent comparable) year-on-year. Foreign exchange translation effects had a net negative impact of 1 percent and portfolio changes a net negative impact of 1 percent. The book-to-bill ratio for the quarter was 1.18x¹, compared to 1.11x in the prior year period.

Income from operations and operational EBITA

Income from operations of \$373 million declined 37 percent. The result includes a combined \$263 million of non-operational items, including \$65 million acquisition-related amortization, a net \$80 million loss related to timing differences on commodities and foreign exchange, restructuring charges for the ABB-OS simplification program, as well as transaction and separation costs related to the carve-out of Power Grids and the Solar Inverters business.

Operational EBITA¹ of \$636 million was 17 percent lower (16 percent in local currencies). The operational EBITA margin¹ of 10.2 percent was 100 basis points lower year-on-year. All businesses reported lower

margins compared to the prior year period, partly offset by improved Corporate and Other, mainly due to lower non-core and stranded costs. Stranded costs of \$21 million were reflected in Corporate and Other.

Net income and basic earnings per share

Net income from continuing operations was \$326 million, 21 percent lower year-on-year. Net income from discontinued operations of \$54 million was lower, with the business impacted by the transfer of stranded costs, ongoing restructuring costs and net losses related to timing differences on commodities and foreign exchange.

Group net income attributable to ABB was \$376 million and basic EPS \$0.18, both 30 percent² lower year-on-year. The group's effective tax rate was 19.5 percent and includes the positive effects from resolving certain estimated tax contingencies. Operational EPS of \$0.30¹ was 2 percent² lower compared to the prior year period.

Cash flow from operating activities

Cash flow from operating activities declined to -\$577 million, compared to -\$256 million in the first quarter of 2019, including \$22 million lower cash flow from operating activities from discontinued operations relative to a year ago.

Cash flow from continuing operating activities was impacted versus the prior year period mainly by timing differences on employee incentive payments, which were distributed in the first quarter this year as opposed to the second quarter last year, as well as by lower income from operations and less favorable timing of tax payments. This was partly offset by improvements in working capital management, including better harmonization of payment terms for trade payables. Net working capital as a percent of revenues was 12.3 percent at quarter end.

Q1 2020 Business results

Electrification (EL)

KEY FIGURES (\$ millions, unless otherwise indicated)			CHANGE	
	Q1 2020	Q1 2019	US\$	Comparable
Orders	3,121	3,363	-7%	-2%
Order backlog	4,386	4,394	0%	+9%
Revenues	2,773	3,057	-9%	-7%
Operational EBITA ¹	318	377	-16%	
as % of operational revenues	11.4%	12.4%	-1.0 pts	

- Subdued short-cycle industrial demand and slowing buildings demand drove orders lower, while select markets including distribution utilities and infrastructure proved resilient. By region, in comparable terms, orders were slightly up in Europe, subdued in the Americas and challenged in AMEA, particularly China.
- Revenues were lower due to curtailed project activities and lower product sales arising from production outages, mainly in Asia.
- Margins were held back by lower volumes and weak performance in solar. This was partly mitigated by improving performance in Installation Products and cost initiatives.

Industrial Automation (IA)

KEY FIGURES		CHANGE		
(\$ millions, unless otherwise indicated)	Q1 2020	Q1 2019	US\$	Comparable
Orders	1,757	1,666	+5%	+8%
Order backlog	5,183	5,139	+1%	+6%
Revenues	1,462	1,518	-4%	-1%
Operational EBITA ¹	144	205	-30%	
as % of operational revenues	9.7%	13.5%	-3.8 pts	

- IA's strong order development was driven by large orders awarded in the mining, pulp and paper and ports segments. Conventional power generation remained challenged while oil & gas, particularly unconventional, slowed. Orders were up in all regions, led by Europe.
- Comparable revenue development reflects ongoing challenges to book-and-bill activities and increasingly curtailed project installation and service activities.
- Margins moved lower due to unfavorable business mix, project execution delays and mobility constrained service activities.

Motion (MO)

KEY FIGURES		CHANGE		
(\$ millions, unless otherwise indicated)	Q1 2020	Q1 2019	US\$	Comparable
Orders	1,901	1,800	+6%	+8%
Order backlog	3,259	2,942	+11%	+15%
Revenues	1,510	1,605	-6%	-4%
Operational EBITA ¹	230	263	-13%	
as % of operational revenues	15.3%	16.4%	-1.1 pts	

- Strong long-cycle order growth was led by large orders in rail and for water applications. In addition, the business also won orders from new OEM customers and saw a strong end of the quarter in China. These positives outpaced a broad-based deterioration in short-cycle demand, particularly for drives. Order growth was led by Europe and AMEA, while the Americas were steady.
- Revenues reflect lower book-and-bill and postponement of deliveries where customer sites closed.
- Margin contraction was driven by lower volumes and incremental logistics costs, partly offset by cost mitigation.

Robotics & Discrete Automation (RA)

KEY FIGURES		CHANGE			
(\$ millions, unless otherwise indicated)	Q1 2020	Q1 2019	US\$	Comparable	
Orders	811	967	-16%	-14%	- Order developments for robotics reflect continued deterioration in the automotive and related industries plus weakening in general industries and 3C demand. Machine automation recorded strong growth, benefiting from prior design wins and customer stockpiling.
Order backlog	1,454	1,556	-7%	-2%	- Growth was strong in the Americas, however orders were weak in Europe, and challenged in AMEA.
Revenues	671	851	-21%	-19%	- Revenues were impacted by lower demand, particularly for systems business and service activities, exacerbated in China because of COVID-19 lockdowns.
Operational EBITA ¹	59	95	-38%		- Margin contraction reflects mainly lower volumes, partly mitigated by cost savings.
as % of operational revenues	8.8%	11.2%	-2.4 pts		

Corporate and Other

KEY FIGURES		CHANGE			
(\$ millions, unless otherwise indicated)	Q1 2020	Q1 2019	US\$		
Orders	(244)	(183)	+61		- Corporate and Other operational EBITA improved to -\$115 million. Compared to a year ago this reflects lower stranded and non-core costs and lower ongoing corporate costs, partly offset by the absence of gains that benefited the result in the first quarter of 2019.
Revenues	(200)	(184)	+16		- In the first quarter of 2020, stranded costs of \$21 million were recognized, impacting operational EBITA by 30 basis points.
Income from operations	(173)	(230)	(57)		
Operational EBITA ¹	(115)	(174)	(59)		

Corporate and Other orders and revenues primarily represent intersegment eliminations.

COVID-19 response

ABB's primary focus is on securing the health and safety of our employees while maintaining business continuity. ABB is constantly monitoring the evolving situation and taking all necessary precautions, in line with local government and WHO guidelines. With the COVID-19 pandemic ongoing, ABB is working constantly with customers and partners to maintain the supply of goods and services. As part of this response, ABB is maximizing use of remote service tools and ABB Ability™ digital solutions, including free remote services. The majority of ABB's production facilities remain fully or partly operational at this time, with some disruption being experienced at production and service sites in specific countries. Where possible the company is adjusting resources to meet the anticipated slow-down in demand and eliminating non-essential costs.

The Board of Directors and the Executive Committee of ABB are voluntarily taking a 10 percent reduction in board compensation and salary for the duration of the crisis. In addition, ABB will contribute CHF 1 million to the International Committee of the Red Cross (ICRC) COVID-19 effort.

The company and its employees are helping communities, for example by using ABB's resources to deliver protective equipment to hospitals and frontline workers in some of the most badly affected countries, such as China and Italy, as well as through equipment donations and fundraising efforts.

Transformation progress

In preparation for its divestment, Power Grids is fully operational on a stand-alone basis. ABB has eliminated the majority of the ~\$290 million annual stranded costs that resulted when Power Grids was deconsolidated. ABB aims to resolve any remaining dis-synergies from the carve-out through the ABB-OS simplification program. The divestment is targeted for completion at the end of the second quarter, as planned, and ABB remains committed to a share buyback program using net cash proceeds from the transaction. ABB is planning to execute this in an efficient and responsible way, taking account of the prevailing circumstances.

Decentralization and the refinement of ABB's operating model through ABB-OS is continuing, enabling the businesses to act quickly to respond to the circumstances around COVID-19 while working towards delivering the cost savings for the Group as planned.

During the quarter, the Electrification business completed the divestment of the solar inverters activities to FIMER SpA on February 29, 2020. On March 17, 2020, ABB Electrification completed the acquisition of a majority stake in Chargedot Shanghai New Energy Technology Co., Ltd. The purchase expands ABB's relationship with leading electric vehicle manufacturers in China and broadens its offering with hardware and software developed specifically for local requirements. Further, ABB Electrification acquired Cylon Controls Ltd, on March 3, 2020, enhancing its Smart Buildings portfolio in the commercial buildings segment.

Short-term outlook

The global economy is expected to contract in 2020 after a rapid deterioration in outlook driven by the COVID-19 pandemic. Despite unprecedented stimuli by governments and central banks around the world and initial signs of recovering economic activity in China, macro-indicators point to a global recession of uncertain duration, as many countries, including the United States, continue to face restrictions with anticipated long-term economic consequences.

The impact of COVID-19, as well as the fall in oil prices, has significantly impacted the short-term outlook in specific end markets such as oil and gas, conventional power generation, automotive and marine. Some end markets such as distribution utilities, data centers, logistics and rail continue to show relative resilience.

ABB is not currently providing guidance for full year 2020. ABB expects its results to be significantly impacted in the second quarter. Orders and revenues are expected to show material sequential decline in all businesses, with Robotics & Discrete Automation expected to decline by more than 30 percent year-on-year. While the company is taking prompt action to adapt its operations and cost base to safeguard profitability, it also expects the loss of volume to further dampen margins. Despite short-term disruptions, ABB is confident in the underlying resilience of its businesses and operating model. The company has a strong balance sheet and is confident that its liquidity needs will be well covered.

More information

The Q1 2020 results press release and presentation slides are available on the ABB News Center at www.abb.com/news and on the Investor Relations homepage at www.abb.com/investorrelations. A conference call and webcast for analysts and investors is scheduled to begin today at 10:00 a.m. CEST (9:00 a.m. BST). To pre-register for the conference call or to join the webcast, please refer to the ABB website: www.abb.com/investorrelations. The recorded session will be available after the event on ABB's website.

ABB (ABBN: SIX Swiss Ex) is a technology leader that is driving the digital transformation of industries. With a history of innovation spanning more than 130 years, ABB has four, customer-focused, globally leading businesses: Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation, supported by the ABB Ability™ digital platform. ABB's Power Grids business will be divested to Hitachi in 2020. ABB operates in more than 100 countries with about 144,000 employees.

INVESTOR CALENDAR	
CEO first perspectives (webcast)	June 10, 2020
Q2 2020 results	July 22, 2020

Important notice about forward-looking information

This press release includes forward-looking information and statements as well as other statements concerning the outlook for our business, including those in the sections of this release titled "COVID-19 response", "Transformation progress" and "Short-term outlook". These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, the economic conditions of the regions and industries that are major markets for ABB. These expectations, estimates and projections are generally identifiable by statements containing words such as "anticipates", "expects," "believes," "estimates," "plans", "targets" or similar expressions. However, there are many risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this press release and which could affect our ability to achieve any or all of our stated targets. The important factors that could cause such differences include, among others, business risks associated with the volatile global economic environment and political conditions, costs associated with compliance activities, market acceptance of new products and services, changes in governmental regulations and currency exchange rates and such other factors as may be discussed from time to time in ABB Ltd's filings with the U.S. Securities and Exchange Commission, including its Annual Reports on Form 20-F. Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved.

Zurich, April 28, 2020

Björn Rosengren, CEO

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April 28, 2020

Q1 2020

Financial information

Financial Information

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Supplemental Reconciliations and Definitions



Key Figures

(\$ in millions, unless otherwise indicated)	Q1 2020	Q1 2019	CHANGE	
			US\$	Comparable ⁽¹⁾
Orders	7,346	7,613	-4%	1%
Order backlog (end March)	13,698	13,853	-1%	8%
Revenues	6,216	6,847	-9%	-7%
Income from operations	373	590	-37%	
Operational EBITA ⁽¹⁾	636	766	-17%	-16% ⁽²⁾
as % of operational revenues ⁽¹⁾	10.2%	11.2%	-1 pts	
Income from continuing operations, net of tax	326	415	-21%	
Net income attributable to ABB	376	535	-30%	
Basic earnings per share (\$)	0.18	0.25	-30% ⁽³⁾	
Operational earnings per share ⁽¹⁾ (\$)	0.30	0.30	-2% ⁽³⁾	-1% ⁽³⁾
Cash flow from operating activities ⁽⁴⁾	(577)	(256)	-125%	

(1) For a reconciliation of non-GAAP measures see "[Supplemental Reconciliations and Definitions](#)" on page 33.

(2) Constant currency (not adjusted for portfolio changes).

(3) EPS growth rates are computed using unrounded amounts. Comparable operational earnings per share is in constant currency (2019 exchange rates not adjusted for changes in the business portfolio).

(4) Cash flow from operating activities includes both continuing and discontinued operations.

(\$ in millions, unless otherwise indicated)		Q1 2020	Q1 2019	CHANGE		
				US\$	Local	Comparable
Orders	ABB Group	7,346	7,613	-4%	-1%	1%
	Electrification	3,121	3,363	-7%	-5%	-2%
	Industrial Automation	1,757	1,666	5%	8%	8%
	Motion	1,901	1,800	6%	8%	8%
	Robotics & Discrete Automation	811	967	-16%	-14%	-14%
	<i>Corporate and Other (incl. intersegment eliminations)</i>	(244)	(183)			
Order backlog (end March)	ABB Group	13,698	13,853	-1%	3%	8%
	Electrification	4,386	4,394	0%	4%	9%
	Industrial Automation	5,183	5,139	1%	6%	6%
	Motion	3,259	2,942	11%	15%	15%
	Robotics & Discrete Automation	1,454	1,556	-7%	-2%	-2%
	<i>Corporate and Other (incl. intersegment eliminations)</i>	(584)	(178)			
Revenues	ABB Group	6,216	6,847	-9%	-8%	-7%
	Electrification	2,773	3,057	-9%	-8%	-7%
	Industrial Automation	1,462	1,518	-4%	-1%	-1%
	Motion	1,510	1,605	-6%	-4%	-4%
	Robotics & Discrete Automation	671	851	-21%	-19%	-19%
	<i>Corporate and Other (incl. intersegment eliminations)</i>	(200)	(184)			
Income from operations	ABB Group	373	590			
	Electrification	199	297			
	Industrial Automation	124	195			
	Motion	191	251			
	Robotics & Discrete Automation	32	77			
	<i>Corporate and Other (incl. intersegment eliminations)</i>	(173)	(230)			
Income from operations %	ABB Group	6.0%	8.6%			
	Electrification	7.2%	9.7%			
	Industrial Automation	8.5%	12.8%			
	Motion	12.6%	15.6%			
	Robotics & Discrete Automation	4.8%	9.0%			
Operational EBITA	ABB Group	636	766	-17%	-16%	
	Electrification	318	377	-16%	-13%	
	Industrial Automation	144	205	-30%	-29%	
	Motion	230	263	-13%	-11%	
	Robotics & Discrete Automation	59	95	-38%	-36%	
	<i>Corporate and Other⁽¹⁾ (incl. intersegment eliminations)</i>	(115)	(174)			
Operational EBITA %	ABB Group	10.2%	11.2%			
	Electrification	11.4%	12.4%			
	Industrial Automation	9.7%	13.5%			
	Motion	15.3%	16.4%			
	Robotics & Discrete Automation	8.8%	11.2%			
Cash flow from operating activities	ABB Group	(577)	(256)			
	Electrification	(65)	(2)			
	Industrial Automation	(41)	44			
	Motion	109	143			
	Robotics & Discrete Automation	53	28			
	<i>Corporate and Other (incl. intersegment eliminations)</i>	(452)	(310)			
	<i>Discontinued operations</i>	(181)	(159)			

(1) Corporate and Other includes Stranded corporate costs of \$21 million and \$67 million for the three months ended March 31, 2020 and 2019, respectively.

Operational EBITA

(\$ in millions, unless otherwise indicated)	Industrial										Robotics & Discrete	
	ABB		Electrification		Automation		Motion		Automation			
	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19
Revenues	6,216	6,847	2,773	3,057	1,462	1,518	1,510	1,605	671	851		
Foreign exchange/commodity timing differences in total revenues	25	(11)	10	(5)	17	—	(3)	—	(2)	(4)		
Operational revenues	6,241	6,836	2,783	3,052	1,479	1,518	1,507	1,605	669	847		
Income from operations	373	590	199	297	124	195	191	251	32	77		
Acquisition-related amortization	65	68	28	29	1	1	13	14	19	20		
Restructuring, related and implementation costs	40	68	15	40	3	5	2	3	7	1		
Changes in obligations related to divested businesses	—	3	—	—	—	—	—	—	—	—		
Changes in pre-acquisition estimates	—	—	—	—	—	—	—	—	—	—		
Gains and losses from sale of businesses	1	1	1	1	—	—	—	—	—	—		
Fair value adjustment on assets and liabilities held for sale	19	—	19	—	—	—	—	—	—	—		
Acquisition- and divestment-related expenses and integration costs	11	24	11	22	—	—	—	—	—	—		
Certain other non-operational items	47	33	—	1	—	2	5	3	1	—		
Foreign exchange/commodity timing differences in income from operations	80	(21)	45	(13)	16	2	19	(8)	—	(3)		
Operational EBITA	636	766	318	377	144	205	230	263	59	95		
Operational EBITA margin (%)	10.2%	11.2%	11.4%	12.4%	9.7%	13.5%	15.3%	16.4%	8.8%	11.2%		

Depreciation and Amortization

(\$ in millions)	Industrial										Robotics & Discrete	
	ABB		Electrification		Automation		Motion		Automation			
	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19	Q1 20	Q1 19
Depreciation	145	144	61	65	12	11	28	28	11	11		
Amortization	82	87	34	37	2	2	14	15	20	20		
including total acquisition-related amortization of:	65	68	28	29	1	1	13	14	19	20		

Orders received and revenues by region

(\$ in millions, unless otherwise indicated)	Orders received				CHANGE				Revenues				CHANGE							
	Q1 20		Q1 19		US\$		Local		Com-		Q1 20		Q1 19		US\$		Local		Com-	
										parable									parable	
Europe	2,813	2,781	1%	4%	5%		2,371	2,447	-3%	0%	0%									
The Americas	2,240	2,232	0%	1%	2%		2,092	2,198	-5%	-4%	-4%									
Asia, Middle East and Africa	2,230	2,541	-12%	-10%	-7%		1,706	2,149	-21%	-19%	-17%									
Intersegment orders/revenues ⁽¹⁾	63	59					47	53												
ABB Group	7,346	7,613	-4%	-1%	1%		6,216	6,847	-9%	-8%	-7%									

(1) Intersegment orders/revenues include sales to the Power Grids business which is presented as discontinued operations and are not eliminated from Total orders/revenues.

Consolidated Financial Information

ABB Ltd Interim Consolidated Income Statements (unaudited)

	Three months ended	
(\$ in millions, except per share data in \$)	Mar. 31, 2020	Mar. 31, 2019
Sales of products	4,993	5,560
Sales of services and other	1,223	1,287
Total revenues	6,216	6,847
Cost of sales of products	(3,575)	(3,877)
Cost of services and other	(731)	(761)
Total cost of sales	(4,306)	(4,638)
Gross profit	1,910	2,209
Selling, general and administrative expenses	(1,252)	(1,355)
Non-order related research and development expenses	(259)	(285)
Other income (expense), net	(26)	21
Income from operations	373	590
Interest and dividend income	18	19
Interest and other finance expense	(22)	(62)
Non-operational pension (cost) credit	36	23
Income from continuing operations before taxes	405	570
Provision for taxes	(79)	(155)
Income from continuing operations, net of tax	326	415
Income from discontinued operations, net of tax	54	149
Net income	380	564
Net income attributable to noncontrolling interests	(4)	(29)
Net income attributable to ABB	376	535
Amounts attributable to ABB shareholders:		
Income from continuing operations, net of tax	325	397
Income from discontinued operations, net of tax	51	138
Net income	376	535
Basic earnings per share attributable to ABB shareholders:		
Income from continuing operations, net of tax	0.15	0.19
Income from discontinued operations, net of tax	0.02	0.06
Net income	0.18	0.25
Diluted earnings per share attributable to ABB shareholders:		
Income from continuing operations, net of tax	0.15	0.19
Income from discontinued operations, net of tax	0.02	0.06
Net income	0.18	0.25
Weighted-average number of shares outstanding (in millions) used to compute:		
Basic earnings per share attributable to ABB shareholders	2,134	2,132
Diluted earnings per share attributable to ABB shareholders	2,138	2,134

Due to rounding, numbers presented may not add to the totals provided.

See Notes to the Interim Consolidated Financial Information

ABB Ltd Interim Condensed Consolidated Statements of Comprehensive Income (unaudited)

(\$ in millions)	Three months ended	
	Mar. 31, 2020	Mar. 31, 2019
Total comprehensive income (loss), net of tax	(127)	562
Total comprehensive income attributable to noncontrolling interests, net of tax	4	(35)
Total comprehensive income (loss) attributable to ABB shareholders, net of tax	(123)	527

Due to rounding, numbers presented may not add to the totals provided.

See Notes to the Interim Consolidated Financial Information

ABB Ltd Consolidated Balance Sheets (unaudited)

(\$ in millions, except share data)	Mar. 31, 2020	Dec. 31, 2019
Cash and equivalents	5,971	3,544
Marketable securities and short-term investments	551	566
Receivables, net	6,288	6,434
Contract assets	1,038	1,025
Inventories, net	4,358	4,184
Prepaid expenses	266	191
Other current assets	661	674
Current assets held for sale and in discontinued operations	9,898	9,840
Total current assets	29,031	26,458
Property, plant and equipment, net	3,856	3,972
Operating lease right-of-use assets	931	994
Goodwill	10,721	10,825
Other intangible assets, net	2,161	2,252
Prepaid pension and other employee benefits	134	133
Investments in equity-accounted companies	35	33
Deferred taxes	784	910
Other non-current assets	450	531
Total assets	48,103	46,108
Accounts payable, trade	4,170	4,353
Contract liabilities	1,665	1,719
Short-term debt and current maturities of long-term debt	5,913	2,287
Current operating leases	293	305
Provisions for warranties	770	816
Dividends payable to shareholders	1,762	–
Other provisions	1,314	1,375
Other current liabilities	3,514	3,761
Current liabilities held for sale and in discontinued operations	5,152	5,650
Total current liabilities	24,553	20,266
Long-term debt	6,830	6,772
Non-current operating leases	664	717
Pension and other employee benefits	1,670	1,793
Deferred taxes	863	911
Other non-current liabilities	1,491	1,669
Total liabilities	36,071	32,128
<i>Commitments and contingencies</i>		
Stockholders' equity:		
Common stock, CHF 0.12 par value		
(2,168,148,264 issued shares at March 31, 2020, and December 31, 2019)	188	188
Additional paid-in capital	75	73
Retained earnings	18,180	19,640
Accumulated other comprehensive loss	(6,089)	(5,590)
Treasury stock, at cost		
(34,572,782 and 34,647,153 shares at March 31, 2020, and December 31, 2019, respectively)	(784)	(785)
Total ABB stockholders' equity	11,570	13,526
Noncontrolling interests	462	454
Total stockholders' equity	12,032	13,980
Total liabilities and stockholders' equity	48,103	46,108

Due to rounding, numbers presented may not add to the totals provided.

See Notes to the Consolidated Financial Information

ABB Ltd Consolidated Statements of Cash Flows (unaudited)

(\$ in millions)	Three months ended	
	Mar. 31, 2020	Mar. 31, 2019
Operating activities:		
Net income	380	564
Less: Income from discontinued operations, net of tax	(54)	(149)
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	227	231
Deferred taxes	44	(29)
Net loss (gain) from derivatives and foreign exchange	73	(26)
Net loss (gain) from sale of property, plant and equipment	(8)	(34)
Net loss (gain) from sale of businesses	1	1
Fair value adjustment on assets and liabilities held for sale	19	–
Share-based payment arrangements	7	11
Other	(37)	(26)
Changes in operating assets and liabilities:		
Trade receivables, net	(61)	(85)
Contract assets and liabilities	(41)	(28)
Inventories, net	(301)	(213)
Accounts payable, trade	(67)	(307)
Accrued liabilities	(59)	154
Provisions, net	(53)	(18)
Income taxes payable and receivable	(218)	11
Other assets and liabilities, net	(248)	(154)
Net cash used in operating activities – continuing operations	(396)	(97)
Net cash used in operating activities – discontinued operations	(181)	(159)
Net cash used in operating activities	(577)	(256)
Investing activities:		
Purchases of investments	(242)	(530)
Purchases of property, plant and equipment and intangible assets	(163)	(207)
Acquisition of businesses (net of cash acquired) and increases in cost- and equity-accounted companies	(73)	(2)
Proceeds from sales of investments	393	420
Proceeds from sales of property, plant and equipment	23	48
Proceeds from sales of businesses (net of transaction costs and cash disposed) and cost- and equity-accounted companies	(140)	(21)
Net cash from settlement of foreign currency derivatives	(129)	2
Other investing activities	(15)	–
Net cash used in investing activities – continuing operations	(346)	(290)
Net cash used in investing activities – discontinued operations	(37)	(44)
Net cash used in investing activities	(383)	(334)
Financing activities:		
Net changes in debt with original maturities of 90 days or less	1,545	456
Increase in debt	2,247	861
Repayment of debt	(180)	(1,440)
Dividends paid to noncontrolling shareholders	(2)	(2)
Other financing activities	(104)	16
Net cash provided by (used in) financing activities – continuing operations	3,506	(109)
Net cash used in financing activities – discontinued operations	(8)	(24)
Net cash provided by (used in) financing activities	3,498	(133)
Effects of exchange rate changes on cash and equivalents	(111)	12
Net change in cash and equivalents	2,427	(711)
Cash and equivalents, beginning of period	3,544	3,445
Cash and equivalents, end of period	5,971	2,734
Supplementary disclosure of cash flow information:		
Interest paid	16	58
Income taxes paid	266	226

Due to rounding, numbers presented may not add to the totals provided.

See Notes to the Consolidated Financial Information

ABB Ltd Consolidated Statements of Changes in Stockholders' Equity (unaudited)

(\$ in millions)	Common stock	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Treasury stock	Total ABB stockholders' equity	Non-controlling interests	Total stockholders' equity
Balance at January 1, 2019	188	56	19,839	(5,311)	(820)	13,952	582	14,534
Adoption accounting standard update			36	(36)		-		-
Comprehensive income:								
Net income			535			535	29	564
Foreign currency translation adjustments, net of tax of \$0				(51)		(51)	6	(45)
Effect of change in fair value of available-for-sale securities, net of tax of \$1				6		6		6
Unrecognized income (expense) related to pensions and other postretirement plans, net of tax of \$17			33			33		33
Change in derivatives qualifying as cash flow hedges, net of tax of \$0			4		4			4
Total comprehensive income						527	35	562
Changes in noncontrolling interests		1				1	(2)	(1)
Dividends to noncontrolling shareholders						-	(7)	(7)
Share-based payment arrangements		13				13		13
Delivery of shares		(1)		1		-		-
Balance at March 31, 2019	188	70	20,411	(5,355)	(819)	14,495	607	15,102
 Balance at January 1, 2020	188	73	19,640	(5,590)	(785)	13,526	454	13,980
Adoption of accounting standard update			(78)			(78)	(9)	(87)
Comprehensive loss:								
Net income			376			376	4	380
Foreign currency translation adjustments, net of tax of \$0				(589)		(589)	(8)	(597)
Effect of change in fair value of available-for-sale securities, net of tax of \$3			9			9		9
Unrecognized income (expense) related to pensions and other postretirement plans, net of tax of \$25			90			90		90
Change in derivatives qualifying as cash flow hedges, net of tax of \$0			(9)			(9)		(9)
Total comprehensive loss						(123)	(4)	(127)
Changes in noncontrolling interests		(3)				(3)	22	19
Dividends to noncontrolling shareholders						-	(2)	(2)
Dividends payable to shareholders			(1,758)			(1,758)		(1,758)
Share-based payment arrangements		8				8		8
Delivery of shares		(2)		2		-		-
Balance at March 31, 2020	188	75	18,180	(6,089)	(784)	11,570	462	12,032

Due to rounding, numbers presented may not add to the totals provided.

See Notes to the Consolidated Financial Information

Notes to the Consolidated Financial Information (unaudited)

Note 1

The Company and basis of presentation

ABB Ltd and its subsidiaries (collectively, the Company) together form a technology leader that is driving the digital transformation of industries with its four customer-focused, globally leading businesses.

The Company's Consolidated Financial Information is prepared in accordance with United States of America generally accepted accounting principles (U.S. GAAP) for interim financial reporting. As such, the Consolidated Financial Information does not include all the information and notes required under U.S. GAAP for annual consolidated financial statements. Therefore, such financial information should be read in conjunction with the audited consolidated financial statements in the Company's Annual Report for the year ended December 31, 2019.

The preparation of financial information in conformity with U.S. GAAP requires management to make assumptions and estimates that directly affect the amounts reported in the Consolidated Financial Information. These accounting assumptions and estimates include:

- growth rates, discount rates and other assumptions used to determine impairment of long-lived assets and in testing goodwill for impairment,
- estimates to determine valuation allowances for deferred tax assets and amounts recorded for uncertain tax positions,
- assumptions used in determining inventory obsolescence and net realizable value,
- estimates and judgements used to measure credit losses,
- estimates and assumptions used in determining the fair values of assets and liabilities assumed in business combinations,
- assumptions used in the determination of corporate costs directly attributable to discontinued operations,
- estimates of loss contingencies associated with litigation or threatened litigation and other claims and inquiries, environmental damages, product warranties, self-insurance reserves, regulatory and other proceedings,
- estimates used to record expected costs for employee severance in connection with restructuring programs,
- assumptions used in the calculation of pension and postretirement benefits and the fair value of pension plan assets, and
- assumptions and projections, principally related to future material, labor and project related overhead costs, used in determining the percentage of completion on projects, as well as the amount of variable consideration the Company expects to be entitled to.

The actual results and outcomes may differ from the Company's estimates and assumptions.

A portion of the Company's activities (primarily long-term construction activities) has an operating cycle that exceeds one year. For classification of current assets and liabilities related to such activities, the Company elected to use the duration of the individual contracts as its operating cycle. Accordingly, there are accounts receivable, contract assets, inventories and provisions related to these contracts which will not be realized within one year that have been classified as current.

Basis of presentation

In the opinion of management, the unaudited Consolidated Financial Information contains all necessary adjustments to present fairly the financial position, results of operations and cash flows for the reported periods. Management considers all such adjustments to be of a normal recurring nature. The Consolidated Financial Information is presented in United States dollars (\$) unless otherwise stated. Due to rounding, numbers presented in the Consolidated Financial Information may not add to the totals provided.

Certain amounts reported in the Consolidated Financial Information for prior periods have been reclassified to conform to the current year's presentation. These changes relate primarily to the reorganization of the Company's operating segments (see Note 16 for details).

Note 2

Recent accounting pronouncements

Applicable for current periods

Measurement of credit losses on financial instruments

In January 2020, the Company adopted a new accounting standard update, along with additional related updates containing targeted improvements and clarifications, that replaces the previous incurred loss impairment methodology for most financial assets with a new “current expected credit loss” model. The new model requires immediate recognition of the estimated credit losses expected to occur over the remaining life of financial assets such as trade and other receivables, held-to-maturity debt securities, loans and other instruments. Measurement of expected credit losses is now based on historical experience, current conditions, and reasonable and supportable forecasts. The update also requires additional disclosures related to estimates and judgments used to measure credit losses. Credit losses relating to available-for-sale debt securities are now measured in a manner similar to the loss impairment methodology, except that the losses are recorded through an allowance for credit losses rather than as a direct write-down of the security.

The Company has adopted these updates on a modified retrospective basis and has therefore recorded a cumulative-effect adjustment of \$87 million to the opening balance of retained earnings on January 1, 2020, relating to an increase in the allowance for credit losses on financial assets carried at amortized cost.

Disclosure Framework — Changes to the disclosure requirements for fair value measurement

In January 2020, the Company adopted a new accounting standard update which modified the disclosure requirements for fair value measurements. The update eliminates the requirements to disclose the amount of and reasons for transfers between Level 1 and 2 of the fair value hierarchy, the timing of transfers between levels and the Level 3 valuation process, while expanding the Level 3 disclosures to include the range and weighted-average used to develop significant unobservable inputs and the changes in unrealized gains and losses on recurring fair value measurements. This update was applied prospectively for the changes and modifications to the Level 3 disclosures, while all other amendments were applied retrospectively. The update does not have a significant impact on the Company's consolidated financial statements.

Applicable for future periods

Simplifying the accounting for income taxes

In December 2019, an accounting standard update was issued which enhances and simplifies various aspects of the income tax accounting guidance related to intraperiod tax allocations, ownership changes in investments, and certain aspects of interim period tax accounting. This update is effective for the Company for annual and interim periods beginning January 1, 2021, with early adoption in any interim period permitted. Depending on the amendment, adoption may be applied on a retrospective, modified retrospective or prospective basis. The Company is currently evaluating the impact of this update on its consolidated financial statements.

Facilitation of the effects of reference rate reform on financial reporting

In March 2020, an accounting standard update was issued which provides temporary optional expedients and exceptions to the current guidance on contract modifications and hedge accounting to ease the financial reporting burdens related to the expected market transition from the London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative reference rates. The update can be adopted and applied no later than December 31, 2022, with early adoption permitted. The Company is currently evaluating the impact of adopting this optional guidance on its consolidated financial statements.

Note 3

Discontinued operations, business divestments and assets held for sale

Discontinued operations

The Company reports a disposal, or planned disposal, of a component or a group of components as a discontinued operation if the disposal represents a strategic shift that has or will have a major effect on the Company's operations and financial results. A strategic shift could include a disposal of a major geographical area, a major line of business or other major parts of the Company. A component may be a reportable segment or an operating segment, a reporting unit, a subsidiary, or an asset group.

Assets and liabilities of a component reported as a discontinued operation are presented as held for sale and in discontinued operations in the Company's Consolidated Balance Sheets.

Interest expense that is not directly attributable to or related to the Company's continuing business or discontinued business is allocated to discontinued operations based on the ratio of net assets to be sold less debt that is required to be paid as a result of the planned disposal transaction to the sum of total net assets of the Company plus consolidated debt. General corporate overhead is not allocated to discontinued operations.

On December 17, 2018, the Company announced an agreement to divest 80.1 percent of its Power Grids business to Hitachi Ltd. (Hitachi) valuing the business at \$11 billion. The business also includes certain real estate properties which were previously reported within Corporate and Other as the Company primarily manages real estate assets centrally as corporate assets. As a result, this business, along with the related real estate assets previously included in Corporate and Other, have been reported as discontinued operations. The divestment is expected to be completed at the end of the second quarter of 2020, following the receipt of customary regulatory approvals as well as the completion of certain legal entity reorganizations expected to be completed before the sale.

As this planned divestment represents a strategic shift that will have a major effect on the Company's operations and financial results, the results of operations for this business have been presented as discontinued operations and the assets and liabilities are reflected as held for sale for all periods presented. In addition, amounts relating to stranded corporate costs have been excluded from discontinued operations and are included as a component of Corporate and Other. Stranded costs represent overhead and other management costs which were previously able to be included in the measure of segment profit (Operational EBITA) for the former Power Grids operating segment but are not directly attributable to the discontinued operation and thus do not qualify to be recorded as part of income from discontinued operations.

Operating results of the discontinued operations are summarized as follows:

(\$ in millions)	Three months ended	
	Mar. 31, 2020	Mar. 31, 2019
Total revenues	1,941	2,129
Total cost of sales	(1,471)	(1,590)
Gross profit	470	539
Expenses	(394)	(330)
Income from operations	76	209
Net interest and other finance expense	(3)	(14)
Non-operational pension (cost) credit	3	3
Income from discontinued operations before taxes	76	198
Provision for taxes	(22)	(49)
Income from discontinued operations, net of tax	54	149

Of the total Income from discontinued operations before taxes in the table above, \$72 million and \$186 million in the three months ended March 31, 2020 and 2019, respectively, are attributable to the Company, while the remainder is attributable to noncontrolling interests.

Income from discontinued operations before taxes excludes stranded costs which were previously able to be allocated to the Power Grids operating segment. As a result, for the three months ended March 31, 2020 and 2019, \$21 million and \$67 million, respectively, of allocated overhead and other management costs, which were previously able to be included in the measure of segment profit for the Power Grids operating segment are now reported as part of Corporate and Other. In the table above, Net interest and other finance expense in the three months ended March 31, 2020 and 2019, includes \$9 million and \$13 million, respectively, of interest expense which has been recorded on an allocated basis in accordance with the Company's accounting policy election. In addition, as required by U.S. GAAP, subsequent to December 17, 2018, the Company has not recorded depreciation or amortization on the property, plant and equipment, and intangible assets reported as discontinued operations.

Included in the reported Total revenues of the Company for the three months ended March 31, 2020 and 2019, are revenues from the Company's operating segments' sales to the Power Grids business of \$47 million and \$53 million, respectively, which represent intercompany transactions that, prior to Power Grids being classified as a discontinued operation, were eliminated in the Company's Consolidated Financial Information (see Note 16).

In addition, the Company also has retained obligations (primarily for environmental and taxes) related to other businesses disposed or otherwise exited that qualified as discontinued operations. Changes to these retained obligations are also included in Income from discontinued operations, net of tax, above.

The major components of assets and liabilities held for sale in the Company's Consolidated Balance Sheets are summarized as follows:

(\$ in millions)	Mar. 31, 2020	Dec. 31, 2019
Receivables, net	2,379	2,541
Contract assets	1,264	1,243
Inventories, net	1,753	1,667
Property, plant and equipment, net	1,736	1,754
Goodwill	1,588	1,631
Other current assets	1,178	1,004
Current assets held for sale and in discontinued operations	9,898	9,840
Accounts payable, trade	1,535	1,722
Contract liabilities	1,205	1,121
Pension and other employee benefits	407	419
Other current liabilities	2,005	1,984
Current liabilities held for sale and in discontinued operations	5,152	5,246

Divestment of the solar inverters business

In February 2020, the Company completed the sale of its solar inverters business for no consideration. Under the agreement, which was reached in July 2019, the Company was required to transfer \$143 million of cash to the buyer on the closing date. In addition, payments totaling EUR 132 million (\$145 million) are required to be transferred to the buyer from 2020 through 2025. During the second half of 2019, the Company recorded an initial loss of \$421 million representing the excess of the carrying value over the estimated fair value of this business. During the three months ended March 31, 2020, \$19 million was in "Other income (expense), net" for changes in fair value occurring during this period. The total loss recorded includes \$99 million for the reclassification from other comprehensive income of the currency translation adjustment related to the business.

The fair value was based on the estimated current market values using Level 3 inputs, considering the agreed-upon sale terms with the buyer. The solar inverters business, which includes the solar inverters business acquired as part of the Power-One acquisition in 2013, is part of the Company's Electrification segment.

As this divestment does not qualify as a discontinued operation, the results of operations for this business prior to its disposal are included in the Company's continuing operations for all periods presented. The assets and liabilities of this business were shown as assets and liabilities held for sale in the Company's Consolidated Balance Sheet at December 31, 2019, and at that date, the carrying amounts of the major classes of these assets and liabilities held for sale were as follows:

(\$ in millions)	Dec. 31, 2019
Assets	
Receivables, net	70
Inventories, net	127
Property, plant and equipment, net	69
Other intangible assets, net	27
Other assets	26
Valuation allowance on assets held for sale	(319)
Current assets held for sale	-
Liabilities	
Accounts payable, trade	86
Contract liabilities	59
Provisions for warranties	108
Other liabilities	49
Fair value adjustment on disposal group	102
Current liabilities held for sale	404

Including the above loss of \$19 million in the three months end March 31, 2020, Income from continuing operations before taxes includes net losses of \$33 million and \$14 million, respectively, from the solar inverters business for the three months ended March 31, 2020 and 2019, respectively.

Note 4

Cash and equivalents, marketable securities and short-term investments

Cash and equivalents, marketable securities and short-term investments consisted of the following:

March 31, 2020						
(\$ in millions)	Cost basis	Gross	Gross	Fair value	Marketable	
		unrealized	unrealized		Cash and	securities
Changes in fair value recorded in net income						
Cash	2,036			2,036	2,036	
Time deposits	3,935			3,935	3,935	
Equity securities	197		(2)	195		195
	6,168	–	(2)	6,166	5,971	195
Changes in fair value recorded in other comprehensive income						
Debt securities available-for-sale:						
U.S. government obligations	271	22		293		293
Corporate	63	2	(2)	63		63
	334	24	(2)	356	–	356
Total	6,502	24	(4)	6,522	5,971	551
December 31, 2019						
(\$ in millions)	Cost basis	Gross	Gross	Fair value	Marketable	
		unrealized	unrealized		Cash and	securities
Changes in fair value recorded in net income						
Cash	2,111			2,111	2,111	
Time deposits	1,433			1,433	1,433	–
Equity securities	294	10		304		304
	3,838	10	–	3,848	3,544	304
Changes in fair value recorded in other comprehensive income						
Debt securities available-for-sale:						
U.S. government obligations	191	7	(1)	197	–	197
Corporate	61	4		65	–	65
	252	11	(1)	262	–	262
Total	4,090	21	(1)	4,110	3,544	566

Note 5

Derivative financial instruments

The Company is exposed to certain currency, commodity, interest rate and equity risks arising from its global operating, financing and investing activities. The Company uses derivative instruments to reduce and manage the economic impact of these exposures.

Currency risk

Due to the global nature of the Company's operations, many of its subsidiaries are exposed to currency risk in their operating activities from entering into transactions in currencies other than their functional currency. To manage such currency risks, the Company's policies require its subsidiaries to hedge their foreign currency exposures from binding sales and purchase contracts denominated in foreign currencies. For forecasted foreign currency denominated sales of standard products and the related foreign currency denominated purchases, the Company's policy is to hedge up to a maximum of 100 percent of the forecasted foreign currency denominated exposures, depending on the length of the forecasted exposures. Forecasted exposures greater than 12 months are not hedged. Forward foreign exchange contracts are the main instrument used to protect the Company against the volatility of future cash flows (caused by changes in exchange rates) of contracted and forecasted sales and purchases denominated in foreign currencies. In addition, within its treasury operations, the Company primarily uses foreign exchange swaps and forward foreign exchange contracts to manage the currency and timing mismatches arising in its liquidity management activities.

Commodity risk

Various commodity products are used in the Company's manufacturing activities. Consequently it is exposed to volatility in future cash flows arising from changes in commodity prices. To manage the price risk of commodities, the Company's policies require that its subsidiaries hedge the commodity price risk exposures from binding contracts, as well as at least 50 percent (up to a maximum of 100 percent) of the forecasted commodity exposure over the next 12 months or longer (up to a maximum of 18 months). Primarily swap contracts are used to manage the associated price risks of commodities.

Interest rate risk

The Company has issued bonds at fixed rates. Interest rate swaps are used to manage the interest rate risk associated with certain debt and generally such swaps are designated as fair value hedges. In addition, from time to time, the Company uses instruments such as interest rate swaps, interest rate futures, bond futures or forward rate agreements to manage interest rate risk arising from the Company's balance sheet structure but does not designate such instruments as hedges.

Equity risk

The Company is exposed to fluctuations in the fair value of its warrant appreciation rights (WARs) issued under its management incentive plan. A WAR gives its holder the right to receive cash equal to the market price of an equivalent listed warrant on the date of exercise. To eliminate such risk, the Company has purchased cash-settled call options, indexed to the shares of the Company, which entitle the Company to receive amounts equivalent to its obligations under the outstanding WARs.

Volume of derivative activity

In general, while the Company's primary objective in its use of derivatives is to minimize exposures arising from its business, certain derivatives are designated and qualify for hedge accounting treatment while others either are not designated or do not qualify for hedge accounting.

Foreign exchange and interest rate derivatives

The gross notional amounts of outstanding foreign exchange and interest rate derivatives (whether designated as hedges or not) were as follows:

Type of derivative (\$ in millions)	Total notional amounts at		
	March 31, 2020	December 31, 2019	March 31, 2019
Foreign exchange contracts	14,654	15,015	12,837
Embedded foreign exchange derivatives	975	924	766
Interest rate contracts	4,195	5,188	3,703

Derivative commodity contracts

The Company uses derivatives to hedge its direct or indirect exposure to the movement in the prices of commodities which are primarily copper, silver and aluminum. The following table shows the notional amounts of outstanding derivatives (whether designated as hedges or not), on a net basis, to reflect the Company's requirements for these commodities:

Type of derivative	Unit	Total notional amounts at		
		March 31, 2020	December 31, 2019	March 31, 2019
Copper swaps	metric tonnes	45,438	42,494	45,365
Silver swaps	ounces	2,075,488	2,508,770	2,513,033
Aluminum swaps	metric tonnes	9,770	8,388	9,347

Equity derivatives

At March 31, 2020, December 31, 2019, and March 31, 2019, the Company held 38 million, 40 million and 40 million cash-settled call options indexed to ABB Ltd shares (conversion ratio 5:1) with a total fair value of \$7 million, \$26 million and \$4 million, respectively.

Cash flow hedges

As noted above, the Company mainly uses forward foreign exchange contracts to manage the foreign exchange risk of its operations, commodity swaps to manage its commodity risks and cash-settled call options to hedge its WAR liabilities. Where such instruments are designated and qualify as cash flow hedges, the effective portion of the changes in their fair value is recorded in "Accumulated other comprehensive loss" and subsequently reclassified into earnings in the same line item and in the same period as the underlying hedged transaction affects earnings.

At March 31, 2020, and December 31, 2019, "Accumulated other comprehensive loss" included net unrealized losses of \$14 million and \$5 million, respectively, net of tax, on derivatives designated as cash flow hedges. Of the amount at March 31, 2020, net losses of \$2 million are expected to be reclassified to earnings in the following 12 months. At March 31, 2020, the longest maturity of a derivative classified as a cash flow hedge was 46 months.

The amount of gains or losses, net of tax, reclassified into earnings due to the discontinuance of cash flow hedge accounting and the amount of ineffectiveness in cash flow hedge relationships directly recognized in earnings were not significant in the three months ended March 31, 2020 and 2019.

The pre-tax effects of derivative instruments, designated and qualifying as cash flow hedges, on "Accumulated other comprehensive loss" (OCI) and the Consolidated Income Statements were not significant.

Fair value hedges

To reduce its interest rate exposure arising primarily from its debt issuance activities, the Company uses interest rate swaps. Where such instruments are designated as fair value hedges, the changes in the fair value of these instruments, as well as the changes in the fair value of the risk component of the underlying debt being hedged, are recorded as offsetting gains and losses in "Interest and other finance expense". Hedge ineffectiveness of instruments designated as fair value hedges for the three months ended March 31, 2020 and 2019, was not significant.

The effect of interest rate contracts, designated and qualifying as fair value hedges, on the Consolidated Income Statements was as follows:

(\$ in millions)	Three months ended March 31,	
	2020	2019
Gains (losses) recognized in Interest and other finance expense:		
- on derivatives designated as fair value hedges	24	26
- on hedged item	(25)	(26)

Derivatives not designated in hedge relationships

Derivative instruments that are not designated as hedges or do not qualify as either cash flow or fair value hedges are economic hedges used for risk management purposes. Gains and losses from changes in the fair values of such derivatives are recognized in the same line in the income statement as the economically hedged transaction.

Furthermore, under certain circumstances, the Company is required to split and account separately for foreign currency derivatives that are embedded within certain binding sales or purchase contracts denominated in a currency other than the functional currency of the subsidiary and the counterparty.

The gains (losses) recognized in the Consolidated Income Statements on derivatives not designated in hedging relationships were as follows:

Type of derivative not designated as a hedge (\$ in millions)	Location	Gains (losses) recognized in income	
		Three months ended March 31,	2020
Foreign exchange contracts	Total revenues	(134)	3
	Total cost of sales	76	(37)
	SG&A expenses ⁽¹⁾	8	(3)
	Non-order related research and development	(1)	-
	Interest and other finance expense	(106)	(20)
Embedded foreign exchange contracts	Total revenues	32	(2)
	Total cost of sales	(4)	-
Commodity contracts	Total cost of sales	(66)	18
Other	Interest and other finance expense	(1)	-
Total		(196)	(41)

(1) SG&A expenses represent "Selling, general and administrative expenses".

The fair values of derivatives included in the Consolidated Balance Sheets were as follows:

(\$ in millions)	March 31, 2020			
	Derivative assets		Derivative liabilities	
	Current in "Other current assets"	Non-current in "Other non-current assets"	Current in "Other current liabilities"	Non-current in "Other non-current liabilities"
Derivatives designated as hedging instruments:				
Foreign exchange contracts	7	-	2	7
Interest rate contracts	-	97	-	-
Cash-settled call options	2	5	-	-
Total	9	102	2	7
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	154	25	238	30
Commodity contracts	5	-	66	2
Cross-currency interest rate swaps	3	-	5	1
Embedded foreign exchange derivatives	27	9	13	6
Total	189	34	322	39
Total fair value	198	136	324	46

(\$ in millions)	December 31, 2019					
	Derivative assets			Derivative liabilities		
	Current in “Other current assets”	Non-current in “Other non-current assets”	Current in “Other current liabilities”	Non-current in “Other non-current liabilities”		
Derivatives designated as hedging instruments:						
Foreign exchange contracts	–	–	2	6		
Interest rate contracts	–	72	–	–		
Cash-settled call options	11	14	–	–		
Total	11	86	2	6		
Derivatives not designated as hedging instruments:						
Foreign exchange contracts	85	14	127	14		
Commodity contracts	17	–	2	–		
Cash-settled call options	–	1	–	–		
Embedded foreign exchange derivatives	7	3	12	3		
Total	109	18	141	17		
Total fair value	120	104	143	23		

Close-out netting agreements provide for the termination, valuation and net settlement of some or all outstanding transactions between two counterparties on the occurrence of one or more pre-defined trigger events.

Although the Company is party to close-out netting agreements with most derivative counterparties, the fair values in the tables above and in the Consolidated Balance Sheets at March 31, 2020, and December 31, 2019, have been presented on a gross basis.

The Company's netting agreements and other similar arrangements allow net settlements under certain conditions. At March 31, 2020, and December 31, 2019, information related to these offsetting arrangements was as follows:

(\$ in millions)	March 31, 2020				
	Gross amount of recognized assets	Derivative liabilities eligible for set-off in case of default	Cash collateral received	Non-cash collateral received	Net asset exposure
Derivatives	298	(191)	–	–	107
Total	298	(191)	–	–	107
 (\$ in millions)					
Type of agreement or similar arrangement	Gross amount of recognized liabilities	Derivative liabilities eligible for set-off in case of default	Cash collateral pledged	Non-cash collateral pledged	Net liability exposure
Derivatives	351	(191)	–	–	160
Total	351	(191)	–	–	160
 (\$ in millions)					
Type of agreement or similar arrangement	Gross amount of recognized assets	Derivative liabilities eligible for set-off in case of default	Cash collateral received	Non-cash collateral received	Net asset exposure
Derivatives	214	(102)	–	–	112
Total	214	(102)	–	–	112
 (\$ in millions)					
Type of agreement or similar arrangement	Gross amount of recognized liabilities	Derivative liabilities eligible for set-off in case of default	Cash collateral pledged	Non-cash collateral pledged	Net liability exposure
Derivatives	151	(102)	–	–	49
Total	151	(102)	–	–	49

Note 6

Fair values

The Company uses fair value measurement principles to record certain financial assets and liabilities on a recurring basis and, when necessary, to record certain non-financial assets at fair value on a non-recurring basis, as well as to determine fair value disclosures for certain financial instruments carried at amortized cost in the financial statements. Financial assets and liabilities recorded at fair value on a recurring basis include foreign currency, commodity and interest rate derivatives, as well as cash-settled call options and available-for-sale securities. Non-financial assets recorded at fair value on a non-recurring basis include long-lived assets that are reduced to their estimated fair value due to impairments.

Fair value is the price that would be received when selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, the Company uses various valuation techniques including the market approach (using observable market data for identical or similar assets and liabilities), the income approach (discounted cash flow models) and the cost approach (using costs a market participant would incur to develop a comparable asset). Inputs used to determine the fair value of assets and liabilities are defined by a three-level hierarchy, depending on the nature of those inputs. The Company has categorized its financial assets and liabilities and non-financial assets measured at fair value within this hierarchy based on whether the inputs to the valuation technique are observable or unobservable. An observable input is based on market data obtained from independent sources, while an unobservable input reflects the Company's assumptions about market data.

The levels of the fair value hierarchy are as follows:

Level 1: Valuation inputs consist of quoted prices in an active market for identical assets or liabilities (observable quoted prices). Assets and liabilities valued using Level 1 inputs include certain actively traded debt securities.

Level 2: Valuation inputs consist of observable inputs (other than Level 1 inputs) such as actively quoted prices for similar assets, quoted prices in inactive markets and inputs other than quoted prices such as interest rate yield curves, credit spreads, or inputs derived from other observable data by interpolation, correlation, regression or other means. The adjustments applied to quoted prices or the inputs used in valuation models may be both observable and unobservable. In these cases, the fair value measurement is classified as Level 2 unless the unobservable portion of the adjustment or the unobservable input to the valuation model is significant, in which case the fair value measurement would be classified as Level 3. Assets and liabilities valued or disclosed using Level 2 inputs include investments in certain funds, certain debt securities that are not actively traded, interest rate swaps, commodity swaps, cash-settled call options, forward foreign exchange contracts, foreign exchange swaps and forward rate agreements, time deposits, as well as financing receivables and debt.

Level 3: Valuation inputs are based on the Company's assumptions of relevant market data (unobservable input).

Whenever quoted prices involve bid-ask spreads, the Company ordinarily determines fair values based on mid-market quotes. However, for the purpose of determining the fair value of cash-settled call options serving as hedges of the Company's management incentive plan, bid prices are used.

When determining fair values based on quoted prices in an active market, the Company considers if the level of transaction activity for the financial instrument has significantly decreased or would not be considered orderly. In such cases, the resulting changes in valuation techniques would be disclosed. If the market is considered disorderly or if quoted prices are not available, the Company is required to use another valuation technique, such as an income approach.

Recurring fair value measures

The fair values of financial assets and liabilities measured at fair value on a recurring basis were as follows:

(\$ in millions)	March 31, 2020			
	Level 1	Level 2	Level 3	Total fair value
Assets				
Securities in "Marketable securities and short-term investments":				
Equity securities	—	195	—	195
Debt securities—U.S. government obligations	293	—	—	293
Debt securities—Corporate	—	63	—	63
Derivative assets—current in "Other current assets"	—	198	—	198
Derivative assets—non-current in "Other non-current assets"	—	136	—	136
Total	293	592	—	885
Liabilities				
Derivative liabilities—current in "Other current liabilities"	—	324	—	324
Derivative liabilities—non-current in "Other non-current liabilities"	—	46	—	46
Total	—	370	—	370

(\$ in millions)	December 31, 2019			
	Level 1	Level 2	Level 3	Total fair value
Assets				
Securities in "Marketable securities and short-term investments":				
Equity securities	–	304	–	304
Debt securities—U.S. government obligations	197	–	–	197
Debt securities—Corporate	–	65	–	65
Derivative assets—current in "Other current assets"	–	120	–	120
Derivative assets—non-current in "Other non-current assets"	–	104	–	104
Total	197	593	–	790
Liabilities				
Derivative liabilities—current in "Other current liabilities"	–	143	–	143
Derivative liabilities—non-current in "Other non-current liabilities"	–	23	–	23
Total	–	166	–	166

The Company uses the following methods and assumptions in estimating fair values of financial assets and liabilities measured at fair value on a recurring basis:

- Securities in "Marketable securities and short-term investments": If quoted market prices in active markets for identical assets are available, these are considered Level 1 inputs; however, when markets are not active, these inputs are considered Level 2. If such quoted market prices are not available, fair value is determined using market prices for similar assets or present value techniques, applying an appropriate risk-free interest rate adjusted for nonperformance risk. The inputs used in present value techniques are observable and fall into the Level 2 category.
- Derivatives: The fair values of derivative instruments are determined using quoted prices of identical instruments from an active market, if available (Level 1 inputs). If quoted prices are not available, price quotes for similar instruments, appropriately adjusted, or present value techniques, based on available market data, or option pricing models are used. Cash-settled call options hedging the Company's WAR liability are valued based on bid prices of the equivalent listed warrant. The fair values obtained using price quotes for similar instruments or valuation techniques represent a Level 2 input unless significant unobservable inputs are used.

Non-recurring fair value measures

The Company adjusted the carrying value of the solar inverters business which was sold in February 2020 (See Note 3 for details). There were no additional significant non-recurring fair value measurements during the three months ended March 31, 2020 and 2019.

Disclosure about financial instruments carried on a cost basis

The fair values of financial instruments carried on a cost basis were as follows:

(\$ in millions)	Carrying value	March 31, 2020			
		Level 1	Level 2	Level 3	Total fair value
Assets					
Cash and equivalents (excluding securities with original maturities up to 3 months):					
Cash	2,036	2,036	–	–	2,036
Time deposits	3,935	–	3,935	–	3,935
Other non-current assets:					
Loans granted	32	–	34	–	34
Restricted time deposits	42	42	–	–	42
Liabilities					
Short-term debt and current maturities of long-term debt (excluding finance lease obligations)	5,890	1,499	4,391	–	5,890
Long-term debt (excluding finance lease obligations)	6,695	6,069	779	–	6,848

(\$ in millions)	Carrying value	December 31, 2019			
		Level 1	Level 2	Level 3	Total fair value
Assets					
Cash and equivalents (excluding securities with original maturities up to 3 months):					
Cash	2,111	2,111	–	–	2,111
Time deposits	1,433	–	1,433	–	1,433
Marketable securities and short-term investments					
Other non-current assets:					
Loans granted	30	–	31	–	31
Restricted time deposits	37	37	–	–	37
Liabilities					
Short-term debt and current maturities of long-term debt (excluding finance lease obligations)	2,270	1,534	736	–	2,270
Long-term debt (excluding finance lease obligations)	6,618	6,267	692	–	6,959

The Company uses the following methods and assumptions in estimating fair values of financial instruments carried on a cost basis:

- Cash and equivalents (excluding securities with original maturities up to 3 months), and Marketable securities and short-term investments (excluding securities): The carrying amounts approximate the fair values as the items are short-term in nature.
- Other non-current assets: Includes (i) loans granted whose fair values are based on the carrying amount adjusted using a present value technique to reflect a premium or discount based on current market interest rates (Level 2 inputs), and (ii) restricted time deposits whose fair values approximate the carrying amounts (Level 1 inputs).
- Short-term debt and current maturities of long-term debt (excluding finance lease obligations): Short-term debt includes commercial paper, bank borrowings and overdrafts. The carrying amounts of short-term debt and current maturities of long-term debt, excluding finance lease obligations, approximate their fair values.
- Long-term debt (excluding finance lease obligations): Fair values of bonds are determined using quoted market prices (Level 1 inputs), if available. For bonds without available quoted market prices and other long-term debt, the fair values are determined using a discounted cash flow methodology based upon borrowing rates of similar debt instruments and reflecting appropriate adjustments for non-performance risk (Level 2 inputs).

Note 7

Commitments and contingencies

Contingencies—Regulatory, Compliance and Legal

Regulatory

As a result of an internal investigation, the Company self-reported to the Securities and Exchange Commission (SEC) and the Department of Justice (DoJ) in the United States as well as to the Serious Fraud Office (SFO) in the United Kingdom concerning certain of its past dealings with Unaoil and its subsidiaries, including alleged improper payments made by these entities to third parties. The SFO has commenced an investigation into this matter. The Company is cooperating fully with the authorities. At this time, it is not possible for the Company to make an informed judgment about the outcome of these matters.

Based on findings during an internal investigation, the Company self-reported to the SEC and the DoJ, to various authorities in South Africa and other countries as well as to certain multilateral financial institutions potential suspect payments and other compliance concerns in connection with some of the Company's dealings with Eskom and related persons. Many of those parties have expressed an interest in, or commenced an investigation into, these matters and the Company is cooperating fully with them. Although the Company believes that there may be an unfavorable outcome in one or more of these compliance-related matters, at this time it is not possible for the Company to make an informed judgment about the possible financial impact.

General

The Company is aware of proceedings, or the threat of proceedings, against it and others in respect of private claims by customers and other third parties with regard to certain actual or alleged anticompetitive practices. Also, the Company is subject to other claims and legal proceedings, as well as investigations carried out by various law enforcement authorities. With respect to the above-mentioned claims, regulatory matters, and any related proceedings, the Company will bear the related costs, including costs necessary to resolve them.

Liabilities recognized

At March 31, 2020, and December 31, 2019, the Company had aggregate liabilities of \$163 million and \$157 million, respectively, included in "Other provisions" and "Other non-current liabilities", for the above regulatory, compliance and legal contingencies, and none of the individual liabilities recognized was significant. As it is not possible to make an informed judgment on, or reasonably predict, the outcome of certain matters and as it is not possible, based on information currently available to management, to estimate the maximum potential liability on other matters, there could be material adverse outcomes beyond the amounts accrued.

Guarantees

General

The following table provides quantitative data regarding the Company's third-party guarantees. The maximum potential payments represent a "worst-case scenario", and do not reflect management's expected outcomes.

Maximum potential payments (\$ in millions)	March 31, 2020	December 31, 2019
Performance guarantees	1,800	1,860
Financial guarantees	10	10
Indemnification guarantees	50	64
Total⁽¹⁾	1,860	1,934

(1) Maximum potential payments include amounts in both continuing and discontinued operations.

The carrying amount of liabilities recorded in the Consolidated Balance Sheets reflects the Company's best estimate of future payments, which it may incur as part of fulfilling its guarantee obligations. In respect of the above guarantees, the carrying amounts of liabilities at March 31, 2020, and December 31, 2019, were not significant.

The Company is party to various guarantees providing financial or performance assurances to certain third parties. These guarantees, which have various maturities up to 2027, mainly consist of performance guarantees whereby (i) the Company guarantees the performance of a third party's product or service according to the terms of a contract and (ii) as member of a consortium/joint-venture that includes third parties, the Company guarantees not only its own performance but also the work of third parties. Such guarantees may include guarantees that a project will be completed within a specified time. If the third party does not fulfill the obligation, the Company will compensate the guaranteed party in cash or in kind. The original maturity dates for the majority of these performance guarantees range from one to eight years.

In conjunction with the divestment of the high-voltage cable and cables accessories businesses, the Company has entered into various performance guarantees with other parties with respect to certain liabilities of the divested business. At March 31, 2020, and December 31, 2019, the maximum potential payable under these guarantees amounts to \$865 million and \$898 million, respectively, and these guarantees have various maturities ranging from one to ten years.

Commercial commitments

In addition, in the normal course of bidding for and executing certain projects, the Company has entered into standby letters of credit, bid/performance bonds and surety bonds (collectively "performance bonds") with various financial institutions. Customers can draw on such performance bonds in the event that the Company does not fulfill its contractual obligations. The Company would then have an obligation to reimburse the financial institution for amounts paid under the performance bonds. At March 31, 2020, and December 31, 2019, the total outstanding performance bonds aggregated to \$6.6 billion and \$6.8 billion, respectively, of which \$3.6 billion and \$3.7 billion, respectively, relates to discontinued operations. There have been no significant amounts reimbursed to financial institutions under these types of arrangements in the three months ended March 31, 2020 and 2019.

Product and order-related contingencies

The Company calculates its provision for product warranties based on historical claims experience and specific review of certain contracts. The reconciliation of the "Provisions for warranties", including guarantees of product performance, was as follows:

(\$ in millions)	2020	2019
Balance at January 1,	816	948
Net change in warranties due to acquisitions, divestments and liabilities held for sale ⁽¹⁾	7	14
Claims paid in cash or in kind	(52)	(68)
Net increase in provision for changes in estimates, warranties issued and warranties expired	28	51
Exchange rate differences	(29)	(8)
Balance at March 31,	770	937

(1) Includes adjustments to the initial purchase price allocation recorded during the measurement period.

Note 8

Contract assets and liabilities

The following table provides information about Contract Assets and Contract Liabilities:

(\$ in millions)	March 31, 2020	December 31, 2019	March 31, 2019
Contract assets	1,038	1,025	1,094
Contract liabilities	1,665	1,719	1,690

Contract assets primarily relate to the Company's right to receive consideration for work completed but for which no invoice has been issued at the reporting date. Contract assets are transferred to receivables when rights to receive payment become unconditional.

Contract liabilities primarily relate to up-front advances received on orders from customers as well as amounts invoiced to customers in excess of revenues recognized, primarily for long-term projects. Contract liabilities are reduced as work is performed and as revenues are recognized.

The significant changes in the Contract assets and Contract liabilities balances were as follows:

(\$ in millions)	Three months ended March 31,			
	2020	2019	Contract assets	Contract liabilities
Revenue recognized, which was included in the Contract liabilities balance at Jan 1, 2020/2019		(513)	–	(420)
Additions to Contract liabilities - excluding amounts recognized as revenue during the period		526	–	406
Receivables recognized that were included in the Contract asset balance at Jan 1, 2020/2019	(276)		(311)	–

At March 31, 2020, the Company had unsatisfied performance obligations totaling \$13,698 million and, of this amount, the Company expects to fulfill approximately 68 percent of the obligations in 2020, approximately 20 percent of the obligations in 2021 and the balance thereafter.

Note 9

Debt

The Company's total debt at March 31, 2020, and December 31, 2019, amounted to \$12,743 million and \$9,059 million, respectively.

Short-term debt and current maturities of long-term debt

The Company's "Short-term debt and current maturities of long-term debt" consisted of the following:

(\$ in millions)	March 31, 2020	December 31, 2019
Short-term debt	4,431	838
Current maturities of long-term debt	1,482	1,449
Total	5,913	2,287

Short-term debt primarily represented issued commercial paper and short-term bank borrowings from various banks. At March 31, 2020, and December 31, 2019, \$1,852 million and \$706 million, respectively, was outstanding under the \$2 billion commercial paper program in the United States. At March 31, 2020, \$274 million was outstanding under the \$2 billion Euro-commercial paper program. No amount was outstanding under this program at December 31, 2019.

On March 25, 2020, the Company entered into a bank-funded short-term EUR 2 billion Revolving Credit Agreement (the "Agreement"). The Agreement provides for fixed-term euro-denominated borrowings up to a maximum principal of EUR 2 billion and expires after six months, with the option for the Company to extend the Agreement to December 15, 2020. Outstanding amounts are subject to interest at the rate of EURIBOR plus a margin of 0.25 percent until July 14, 2020, and then a margin of 0.50 percent until the initial expiration of the Agreement. Any amounts outstanding during the optional extension period would be subject to a margin of 0.75 percent. The maximum principal available to be borrowed will be reduced by any net proceeds received from the issuance of public debt exceeding EUR 500 million. In addition, the Agreement will terminate and all outstanding amounts will be due 15 days after the completion of the sale of the Power Grids business. The Company requested the full amount to be borrowed and the proceeds were received on March 31, 2020, amounting to \$2,183 million, net of issuance costs.

At March 31, 2020, the Company continues to have access to the full amount under its existing \$2 billion revolving credit facility.

Long-term debt

The Company's long-term debt at March 31, 2020, and December 31, 2019, amounted to \$6,830 million and \$6,772 million, respectively.

Outstanding bonds (including maturities within the next 12 months) were as follows:

(in millions)	March 31, 2020			December 31, 2019		
	Nominal outstanding	Carrying value ⁽¹⁾	Nominal outstanding	Carrying value ⁽¹⁾		
Bonds:						
2.8% USD Notes, due 2020	USD 300	\$ 300	USD 300	\$ 300		
Floating EUR Notes, due 2020	EUR 1,000	\$ 1,096	EUR 1,000	\$ 1,122		
4.0% USD Notes, due 2021	USD 650	\$ 648	USD 650	\$ 648		
2.25% CHF Bonds, due 2021	CHF 350	\$ 373	CHF 350	\$ 373		
5.625% USD Notes, due 2021	USD 250	\$ 259	USD 250	\$ 260		
2.875% USD Notes, due 2022	USD 1,250	\$ 1,291	USD 1,250	\$ 1,267		
3.375% USD Notes, due 2023	USD 450	\$ 448	USD 450	\$ 448		
0.625% EUR Instruments, due 2023	EUR 700	\$ 781	EUR 700	\$ 799		
0.75% EUR Instruments, due 2024	EUR 750	\$ 843	EUR 750	\$ 859		
0.3% CHF Notes, due 2024	CHF 280	\$ 289	CHF 280	\$ 288		
3.8% USD Notes, due 2028	USD 750	\$ 746	USD 750	\$ 746		
1.0% CHF Notes, due 2029	CHF 170	\$ 176	CHF 170	\$ 175		
4.375% USD Notes, due 2042	USD 750	\$ 724	USD 750	\$ 724		
Total		\$ 7,974		\$ 8,009		

(1) USD carrying values include unamortized debt issuance costs, bond discounts or premiums, as well as adjustments for fair value hedge accounting, where appropriate.

On April 3, 2020, the Company repaid at maturity its USD300 million 2.8% Notes.

Note 10

Income taxes

In calculating the provision for income taxes, the Company uses an estimate of the annual effective tax rate based upon the facts and circumstances known at each interim period. On a quarterly basis, the actual effective tax rate is adjusted, as appropriate, based upon changed facts and circumstances, if any, as compared to those forecasted at the beginning of the year and each interim period thereafter.

The effective tax rate of 19.5 percent in the three months ended March 31, 2020, was lower than the effective tax rate of 27.2 percent in the three months ended March 31, 2019, primarily due to a favorable resolution of an uncertain tax position partially offset by increases to the valuation allowance in certain countries.

Note 11

Employee benefits

The Company operates defined benefit pension plans, defined contribution pension plans, and termination indemnity plans, in accordance with local regulations and practices. These plans cover a large portion of the Company's employees and provide benefits to employees in the event of death, disability, retirement, or termination of employment. Certain of these plans are multi-employer plans. The Company also operates other postretirement benefit plans including postretirement health care benefits, and other employee-related benefits for active employees including long-service award plans. The measurement date used for the Company's employee benefit plans is December 31. The funding policies of the Company's plans are consistent with the local government and tax requirements.

The following tables include amounts relating to defined benefit pension plans and other postretirement benefits for both continuing and discontinued operations.

Net periodic benefit cost of the Company's defined benefit pension and other postretirement benefit plans consisted of the following:

(\$ in millions)	Defined pension benefits				Other postretirement	
	Switzerland		International		benefits	
	2020	2019	2020	2019	2020	2019
Three months ended March 31,						
Operational pension cost:						
Service cost	22	19	27	28	–	–
Operational pension cost	22	19	27	28	–	–
Non-operational pension cost (credit):						
Interest cost	–	4	32	44	1	1
Expected return on plan assets	(31)	(28)	(63)	(70)	–	–
Amortization of prior service cost (credit)	(4)	(4)	1	1	(1)	(1)
Amortization of net actuarial loss	2	–	25	27	(1)	(1)
Curtailments, settlements and special termination benefits	–	–	–	1	–	–
Non-operational pension cost (credit)	(33)	(28)	(5)	3	(1)	(1)
Net periodic benefit cost (credit)	(11)	(9)	22	31	(1)	(1)

The components of net periodic benefit cost other than the service cost component are included in the line "Non-operational pension (cost) credit" in the income statement. Net periodic benefit cost includes \$12 million and \$10 million, for the three months ended March 31, 2020 and 2019, respectively, related to discontinued operations.

Employer contributions were as follows:

(\$ in millions)	Defined pension benefits				Other postretirement	
	Switzerland		International		benefits	
	2020	2019	2020	2019	2020	2019
Three months ended March 31,						
Total contributions to defined benefit pension and other postretirement benefit plans	24	23	21	24	1	2

The Company expects to make contributions totaling approximately \$349 million and \$10 million to its defined pension plans and other postretirement benefit plans, respectively, for the full year 2020.

Note 12

Stockholder's equity

At the Annual General Meeting of Shareholders on March 26, 2020, shareholders approved the proposal of the Board of Directors to distribute 0.80 Swiss francs per share to shareholders. The declared dividend amounted to \$1,758 million and was paid in April 2020.

Note 13

Earnings per share

Basic earnings per share is calculated by dividing income by the weighted-average number of shares outstanding during the period. Diluted earnings per share is calculated by dividing income by the weighted-average number of shares outstanding during the period, assuming that all potentially dilutive securities were exercised, if dilutive. Potentially dilutive securities comprise outstanding written call options, and outstanding options and shares granted subject to certain conditions under the Company's share-based payment arrangements.

Basic earnings per share

(\$ in millions, except per share data in \$)	Three months ended March 31,	
	2020	2019
Amounts attributable to ABB shareholders:		
Income from continuing operations, net of tax	325	397
Income from discontinued operations, net of tax	51	138
Net income	376	535
Weighted-average number of shares outstanding (in millions)	2,134	2,132
Basic earnings per share attributable to ABB shareholders:		
Income from continuing operations, net of tax	0.15	0.19
Income from discontinued operations, net of tax	0.02	0.06
Net income	0.18	0.25

Diluted earnings per share

(\$ in millions, except per share data in \$)	Three months ended March 31,	
	2020	2019
Amounts attributable to ABB shareholders:		
Income from continuing operations, net of tax	325	397
Income from discontinued operations, net of tax	51	138
Net income	376	535
Weighted-average number of shares outstanding (in millions)	2,134	2,132
Effect of dilutive securities:		
Call options and shares	4	2
Adjusted weighted-average number of shares outstanding (in millions)	2,138	2,134
Diluted earnings per share attributable to ABB shareholders:		
Income from continuing operations, net of tax	0.15	0.19
Income from discontinued operations, net of tax	0.02	0.06
Net income	0.18	0.25

Note 14

Reclassifications out of accumulated other comprehensive loss

The following table shows changes in "Accumulated other comprehensive loss" (OCI) attributable to ABB, by component, net of tax:

(\$ in millions)	Foreign currency	Unrealized gains (losses) on available-for-sale securities	Pension and other postretirement plan adjustments	Unrealized gains (losses) of cash flow hedge derivatives	Total OCI
	translation adjustments				
Balance at January 1, 2019	(3,324)	(4)	(1,967)	(16)	(5,311)
Cumulative effect of changes in accounting principles ⁽¹⁾	–	–	(36)	–	(36)
Other comprehensive (loss) income:					
Other comprehensive (loss) income before reclassifications	(45)	4	18	–	(23)
Amounts reclassified from OCI	–	2	15	4	21
Total other comprehensive (loss) income	(45)	6	33	4	(2)
Less:					
Amounts attributable to noncontrolling interests	6	–	–	–	6
Balance at March 31, 2019	(3,375)	2	(1,970)	(12)	(5,355)

(\$ in millions)	Foreign currency	Unrealized gains (losses) on available-for-sale securities	Pension and other postretirement plan adjustments	Unrealized gains (losses) of cash flow hedge derivatives	Total OCI
	translation adjustments				
Balance at January 1, 2020	(3,450)	10	(2,145)	(5)	(5,590)
Other comprehensive (loss) income:					
Other comprehensive (loss) income before reclassifications	(696)	9	74	(19)	(632)
Amounts reclassified from OCI	99	–	16	10	125
Total other comprehensive (loss) income	(597)	9	90	(9)	(507)
Less:					
Amounts attributable to noncontrolling interests	(8)	–	–	–	(8)
Balance at March 31, 2020	(4,039)	19	(2,055)	(14)	(6,089)

(1) Amount relates to the adoption of an accounting standard update in 2019 regarding the Tax Cuts and Jobs Act of 2017.

The following table reflects amounts reclassified out of OCI in respect of Foreign currency translation adjustments and Pension and other postretirement plan adjustments:

(\$ in millions)	Details about OCI components	Location of (gains) losses reclassified from OCI	Three months ended March 31,	
			2020	2019
Foreign currency translation adjustments:				
Translation loss on solar inverters business (see Note 3)	Other income (expense), net		99	–
Pension and other postretirement plan adjustments:				
Amortization of prior service cost	Non-operational pension (cost) credit ⁽¹⁾		(4)	(4)
Amortization of net actuarial loss	Non-operational pension (cost) credit ⁽¹⁾		26	26
Total before tax			22	22
Tax	Provision for taxes		(6)	(7)
Amounts reclassified from OCI			16	15

(1) Amounts include total credits of \$3 million for each of the three months ended March 31, 2020 and 2019, reclassified from OCI to Income from discontinued operations.

The amounts in respect of Unrealized gains (losses) on available-for-sale securities and Unrealized gains (losses) of cash flow hedge derivatives were not significant for the three months ended March 31, 2020 and 2019.

Note 15

Restructuring and related expenses

OS program

In December 2018, the Company announced a two-year restructuring program with the objective of simplifying its business model and structure through the implementation of a new organizational structure driven by its businesses. The program includes the elimination of the country and regional structures within the current matrix organization, including the elimination of the three regional Executive Committee roles. The operating businesses will each be responsible for both their customer-facing activities and business support functions, while the remaining Group-level corporate activities will primarily focus on Group strategy, portfolio and performance management, capital allocation, core technologies and the ABB Ability™ platform. The program is expected to be performed over two years and incur restructuring expenses of \$350 million, primarily relating to employee severance costs.

The following table outlines the costs incurred in the three months ended March 31, 2020 and 2019, respectively, the cumulative costs incurred up to March 31, 2020, and the total amount of costs expected to be incurred under the program per operating segment:

(\$ in millions)	Cost incurred ⁽¹⁾		Cumulative net cost incurred up to March 31, 2020 ⁽¹⁾	Total expected costs ⁽¹⁾
	Three months ended March 31, 2020	2019		
Electrification	2	(2)	52	80
Industrial Automation	–	–	24	40
Motion	–	–	7	50
Robotics & Discrete Automation	6	–	14	20
Corporate and Other	10	1	75	160
Total	18	(1)	172	350

(1) Costs incurred, Cumulative net cost incurred up to March 31, 2020, and Total expected costs have been recast to reflect the reorganization of the Company's operating segments as outlined in Note 16.

Of the total expected costs of \$350 million the majority is related to employee severance costs. The Company recorded the following expenses, net of changes in estimates, under this program:

(\$ in millions)	Three months ended March 31,		Cumulative costs incurred up to March 31, 2020
	2020	2019	
Employee severance costs	15	(1)	161
Estimated contract settlement, loss order and other costs	2	–	3
Inventory and long-lived asset impairments	1	–	8
Total	18	(1)	172

Expenses, net of changes in estimates, associated with this program are recorded in the following line items in the Consolidated Income Statements:

(\$ in millions)	Three months ended March 31,	
	2020	2019
Total cost of sales	3	(1)
Other income (expense), net	15	–
Total	18	(1)

Liabilities associated with the OS program are primarily included in "Other provisions". The following table shows the activity from the beginning of the program to March 31, 2020, by expense type:

(\$ in millions)	Employee severance costs	Contract settlement, loss order and other costs	Total
Liability at January 1, 2018	–	–	–
Expenses	65	–	65
Liability at December 31, 2018	65	–	65
Expenses	111	1	112
Cash payments	(44)	(1)	(45)
Change in estimates	(30)	–	(30)
Exchange rate differences	(3)	–	(3)
Liability at December 31, 2019	99	–	99
Expenses	17	2	19
Cash payments	(29)	(1)	(30)
Change in estimates	(2)	–	(2)
Exchange rate differences	(2)	1	(1)
Liability at March 31, 2020	83	2	85

Other restructuring-related activities

In the three months ended March 31, 2019, the Company executed various other restructuring-related activities and incurred expenses of \$50 million. This amount relates mainly to employee severance costs which were primarily recorded in Total Cost of sales and Selling, general and administrative expenses. In the three months ended March 31, 2020, expenses in relation to various other restructuring-related activities were not significant.

At March 31, 2020, and December 31, 2019, \$153 million and \$189 million, respectively, was recorded for other restructuring-related liabilities and is primarily included in "Other provisions".

Note 16

Operating segment data

The Chief Operating Decision Maker (CODM) is the Chief Executive Officer. The CODM allocates resources to and assesses the performance of each operating segment using the information outlined below. The Company is organized into operating segments based on products and services and these operating segments consist of Electrification, Industrial Automation, Motion, and Robotics & Discrete Automation. The remaining operations of the Company are included in Corporate and Other.

A description of the types of products and services provided by each reportable segment is as follows:

- **Electrification:** manufactures and sells electrical products and solutions which are designed to provide sustainable, smarter and safer electrical flow from the substation to the socket. The portfolio of increasingly digital and connected solutions includes electric vehicle charging infrastructure, solar power solutions, modular substation packages, distribution automation products, switchboard and panelboards, switchgear, UPS solutions, circuit breakers, measuring and sensing devices, control products, wiring accessories, enclosures and cabling systems and intelligent home and building solutions, designed to integrate and automate lighting, heating, ventilation, security and data communication networks.
- **Industrial Automation:** develops and sells integrated automation and electrification systems and solutions, such as process and discrete control solutions, advanced process control software and manufacturing execution systems, sensing, measurement and analytical instrumentation and solutions, electric ship propulsion systems, as well as large turbochargers. In addition, the business offers a comprehensive range of services ranging from repair to advanced services such as remote monitoring, preventive maintenance and cybersecurity services.
- **Motion:** manufactures and sells motors, generators, drives, wind converters, mechanical power transmissions, complete electrical powertrain systems and related services and digital solutions for a wide range of applications in industry, transportation, infrastructure, and utilities.
- **Robotics & Discrete Automation:** develops and sells robotics and machinery automation solutions, including robots, controllers, software, function packages, cells, programmable logic controllers (PLC), industrial PCs (IPC), servo motion, engineered manufacturing solutions, turn-key solutions and collaborative robot solutions for a wide range of applications. In addition, the business offers a comprehensive range of digital solutions as well as field and after sales service.
- **Corporate and Other:** includes headquarters, central research and development, the Company's real estate activities, Corporate Treasury Operations and other non-core operating activities.

The primary measure of profitability on which the operating segments are evaluated is Operational EBITA, which represents income from operations excluding:

- amortization expense on intangibles arising upon acquisitions (acquisition-related amortization),
- restructuring, related and implementation costs,
- changes in the amount recorded for obligations related to divested businesses occurring after the divestment date (changes in obligations related to divested businesses),
- changes in estimates relating to opening balance sheets of acquired businesses (changes in pre-acquisition estimates),
- gains and losses from sale of businesses (including fair value adjustment on assets and liabilities held for sale),
- acquisition- and divestment-related expenses and integration costs,
- certain other non-operational items, as well as
- foreign exchange/commodity timing differences in income from operations consisting of: (a) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (b) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (c) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities).

Certain other non-operational items generally includes: certain regulatory, compliance and legal costs, certain asset write downs/impairments as well as other items which are determined by management on a case-by-case basis.

The CODM primarily reviews the results of each segment on a basis that is before the elimination of profits made on inventory sales between segments. Segment results below are presented before these eliminations, with a total deduction for intersegment profits to arrive at the Company's consolidated Operational EBITA. Intersegment sales and transfers are accounted for as if the sales and transfers were to third parties, at current market prices.

The following tables present disaggregated segment revenues from contracts with customers, Operational EBITA, and the reconciliations of consolidated Operational EBITA to Income from continuing operations before taxes for the three months ended March 31, 2020 and 2019, as well as total assets at March 31, 2020, and December 31, 2019.

(\$ in millions)	Three months ended March 31, 2020							
	Electrification	Industrial Automation	Motion	Robotics & Discrete Automation		Corporate and Other		
				Electrification	Industrial Automation	Motion	Robotics & Discrete Automation	Corporate and Other
Geographical markets								
Europe	964	577	451	353	26	2,371		
The Americas	1,031	390	569	103	–	2,092		
of which: United States	801	247	492	70	–	1,610		
Asia, Middle East and Africa	678	459	368	198	3	1,706		
of which: China	283	110	154	119	–	666		
	2,673	1,426	1,388	654	28	6,169		
End Customer Markets								
Utilities	431	236	161	–	2	830		
Industry	1,285	829	884	636	6	3,640		
Transport & infrastructure	957	361	343	18	20	1,699		
	2,673	1,426	1,388	654	28	6,169		
Product type								
Products	2,362	306	1,198	387	25	4,278		
Systems	112	396	–	157	3	668		
Services and other	199	724	190	110	–	1,223		
	2,673	1,426	1,388	654	28	6,169		
Third-party revenues	2,673	1,426	1,388	654	28	6,169		
Intersegment revenues ⁽¹⁾	100	36	122	17	(228)	47		
Total Revenues⁽²⁾	2,773	1,462	1,510	671	(200)	6,216		

(\$ in millions)	Three months ended March 31, 2019							
	Electrification	Industrial Automation	Motion	Robotics & Discrete Automation		Corporate and Other		
				Electrification	Industrial Automation	Motion	Robotics & Discrete Automation	Corporate and Other
Geographical markets								
Europe	983	585	442	421	16	2,447		
The Americas	1,106	372	600	120	–	2,198		
of which: United States	862	229	515	75	–	1,680		
Asia, Middle East and Africa	865	533	432	297	22	2,149		
of which: China	399	147	202	221	–	969		
	2,954	1,490	1,474	838	38	6,794		
End Customer Markets								
Utilities	460	249	147	–	3	859		
Industry	1,151	893	990	822	27	3,883		
Transport & infrastructure	1,343	348	337	16	8	2,052		
	2,954	1,490	1,474	838	38	6,794		
Product type								
Products	2,577	355	1,267	477	39	4,715		
Systems	140	417	–	236	(1)	792		
Services and other	237	718	207	125	–	1,287		
	2,954	1,490	1,474	838	38	6,794		
Third-party revenues	2,954	1,490	1,474	838	38	6,794		
Intersegment revenues ⁽¹⁾	103	28	131	13	(222)	53		
Total Revenues⁽²⁾	3,057	1,518	1,605	851	(184)	6,847		

(1) Intersegment revenues include sales to the Power Grids business which is presented as discontinued operations and are not eliminated from Total revenues.

(2) Due to rounding, numbers presented may not add to the totals provided.

(\$ in millions)	Three months ended March 31,	
	2020	2019
<i>Operational EBITA:</i>		
Electrification	318	377
Industrial Automation	144	205
Motion	230	263
Robotics & Discrete Automation	59	95
Corporate and Other		
– Non-core business activities	(11)	(40)
– Stranded corporate costs	(21)	(67)
– Corporate costs and intersegment elimination	(83)	(67)
Total	636	766
Acquisition-related amortization	(65)	(68)
Restructuring, related and implementation costs ⁽¹⁾	(40)	(68)
Changes in obligations related to divested businesses	–	(3)
Gains and losses from sale of businesses	(1)	(1)
Fair value adjustment on assets and liabilities held for sale	(19)	–
Acquisition- and divestment-related expenses and integration costs	(11)	(24)
Foreign exchange/commodity timing differences in income from operations:		
Unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives)	(74)	6
Realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized	(4)	(1)
Unrealized foreign exchange movements on receivables/payables (and related assets/liabilities)	(2)	16
Certain other non-operational items:		
Costs for planned divestment of Power Grids	(44)	(20)
Regulatory, compliance and legal costs	–	(8)
Business transformation costs	(7)	(3)
Executive Committee transition costs	2	–
Other non-operational items	2	(2)
Income from operations	373	590
Interest and dividend income	18	19
Interest and other finance expense	(22)	(62)
Non-operational pension (cost) credit	36	23
Income from continuing operations before taxes	405	570

(1) At March 31, 2020 and 2019, amounts include \$16 million and \$19 million of implementation costs in relation to the OS program, respectively.

(\$ in millions)	Total assets ^{(1), (2)}	
	March 31, 2020	December 31, 2019
Electrification	11,812	11,671
Industrial Automation	4,515	4,559
Motion	6,138	6,149
Robotics & Discrete Automation	4,605	4,661
Corporate and Other	21,033	19,068
Consolidated	48,103	46,108

(1) Total assets are after intersegment eliminations and therefore reflect third-party assets only.

(2) At March 31, 2020, and December 31, 2019, respectively, Corporate and Other includes \$9,898 million and \$9,840 million of assets in the Power Grids business which is reported as discontinued operations (see Note 3).

Supplemental Reconciliations and Definitions

The following reconciliations and definitions include measures which ABB uses to supplement its Consolidated Financial Information (unaudited) which is prepared in accordance with United States generally accepted accounting principles (U.S. GAAP). Certain of these financial measures are, or may be, considered non-GAAP financial measures as defined in the rules of the U.S. Securities and Exchange Commission (SEC).

While ABB's management believes that the non-GAAP financial measures herein are useful in evaluating ABB's operating results, this information should be considered as supplemental in nature and not as a substitute for the related financial information prepared in accordance with U.S. GAAP. Therefore these measures should not be viewed in isolation but considered together with the Consolidated Financial Information (unaudited) prepared in accordance with U.S. GAAP as of and for the three months ended March 31, 2020.

On January 1, 2019, the Company adopted a new accounting standard for lease accounting and on January 1, 2020, the Company adopted a new accounting update for the measurement of credit losses on financial instruments (see Note 2 to the Consolidated Financial Information). Consistent with the method of adoption elected, comparable information has not been restated to reflect the adoption of this new standard {and accounting update} and continues to be measured and reported under the accounting standard in effect for those periods presented.

Comparable growth rates

Growth rates for certain key figures may be presented and discussed on a "comparable" basis. The comparable growth rate measures growth on a constant currency basis. Since we are a global company, the comparability of our operating results reported in U.S. dollars is affected by foreign currency exchange rate fluctuations. We calculate the impacts from foreign currency fluctuations by translating the current-year periods' reported key figures into U.S. dollar amounts using the exchange rates in effect for the comparable periods in the previous year.

Comparable growth rates are also adjusted for changes in our business portfolio. Adjustments to our business portfolio occur due to acquisitions, divestments, or by exiting specific business activities or customer markets. The adjustment for portfolio changes is calculated as follows: where the results of any business acquired or divested have not been consolidated and reported for the entire duration of both the current and comparable periods, the reported key figures of such business are adjusted to exclude the relevant key figures of any corresponding quarters which are not comparable when computing the comparable growth rate. Certain portfolio changes which do not qualify as divestments under U.S. GAAP have been treated in a similar manner to divestments. Changes in our portfolio where we have exited certain business activities or customer markets are adjusted as if the relevant business was divested in the period when the decision to cease business activities was taken. We do not adjust for portfolio changes where the relevant business has annualized revenues of less than \$50 million.

The following tables provide reconciliations of reported growth rates of certain key figures to their respective comparable growth rate.

Comparable growth rate reconciliation by business

Business	Q1 2020 compared to Q1 2019							
	Order growth rate				Revenue growth rate			
	US\$ (as reported)	Foreign exchange impact	Portfolio changes	Comparable	US\$ (as reported)	Foreign exchange impact	Portfolio changes	Comparable
Electrification	-7%	2%	3%	-2%	-9%	1%	1%	-7%
Industrial Automation	5%	3%	0%	8%	-4%	3%	0%	-1%
Motion	5%	3%	0%	8%	-6%	2%	0%	-4%
Robotics & Discrete Automation	-16%	2%	0%	-14%	-21%	2%	0%	-19%
ABB Group	-4%	3%	2%	1%	-9%	1%	1%	-7%

Regional comparable growth rate reconciliation

Region	Q1 2020 compared to Q1 2019							
	Order growth rate				Revenue growth rate			
	US\$ (as reported)	Foreign exchange impact	Portfolio changes	Comparable	US\$ (as reported)	Foreign exchange impact	Portfolio changes	Comparable
Europe	1%	3%	1%	5%	-3%	3%	0%	0%
The Americas	0%	1%	1%	2%	-5%	1%	0%	-4%
Asia, Middle East and Africa	-12%	2%	3%	-7%	-21%	2%	2%	-17%
ABB Group	-4%	3%	2%	1%	-9%	1%	1%	-7%

Order backlog growth rate reconciliation

Business	March 31, 2020 compared to March 31, 2019			
	US\$	Foreign	Portfolio	Comparable
	(as reported)	exchange impact		
Electrification	0%	4%	5%	9%
Industrial Automation	1%	5%	0%	6%
Motion	11%	4%	0%	15%
Robotics & Discrete Automation	-7%	5%	0%	-2%
ABB Group	-1%	4%	5%	8%

Other growth rate reconciliations

	Q1 2020 compared to Q1 2019			
	US\$	Foreign	Portfolio	Comparable
	(as reported)	exchange impact		
Service orders	-7%	3%	0%	-4%
Service revenues	-5%	3%	0%	-2%

Operational EBITA as % of operational revenues (Operational EBITA margin)

Definition

Operational EBITA margin

Operational EBITA margin is Operational EBITA as a percentage of Operational revenues.

Operational EBITA

Operational earnings before interest, taxes and acquisition-related amortization (Operational EBITA) represents Income from operations excluding:

- acquisition-related amortization (as defined below),
- restructuring, related and implementation costs,
- changes in the amount recorded for obligations related to divested businesses occurring after the divestment date (changes in obligations related to divested businesses),
- changes in estimates relating to opening balance sheets of acquired businesses (changes in pre-acquisition estimates),
- gains and losses from sale of businesses (including fair value adjustment on assets and liabilities held for sale),
- acquisition- and divestment-related expenses and integration costs,
- certain other non-operational items, as well as
- foreign exchange/commodity timing differences in income from operations consisting of: (a) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (b) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (c) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities).

Certain other non-operational items generally includes: certain regulatory, compliance and legal costs, certain asset write downs/impairments as well as other items which are determined by management on a case-by-case basis.

Operational EBITA is our measure of segment profit but is also used by management to evaluate the profitability of the Company as a whole.

Acquisition-related amortization

Amortization expense on intangibles arising upon acquisitions.

Restructuring, related and implementation costs

Restructuring, related and implementation costs consists of restructuring and other related expenses, as well as internal and external costs relating to the implementation of group-wide restructuring programs.

Operational revenues

The Company presents Operational revenues solely for the purpose of allowing the computation of Operational EBITA margin. Operational revenues are total revenues adjusted for foreign exchange/commodity timing differences in total revenues of: (i) unrealized gains and losses on derivatives, (ii) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (iii) unrealized foreign exchange movements on receivables (and related assets). Operational revenues are not intended to be an alternative measure to Total Revenues, which represent our revenues measured in accordance with U.S. GAAP.

Reconciliation

The following tables provide reconciliations of consolidated Operational EBITA to Net Income and Operational EBITA Margin by business.

Reconciliation of consolidated Operational EBITA to Net Income

(\$ in millions)	Three months ended March 31,	
	2020	2019
Operational EBITA	636	766
Acquisition-related amortization	(65)	(68)
Restructuring, related and implementation costs ⁽¹⁾	(40)	(68)
Changes in obligations related to divested businesses	–	(3)
Gains and losses from sale of businesses	(1)	(1)
Fair value adjustments on assets and liabilities held for sale	(19)	–
Acquisition- and divestment-related expenses and integration costs	(11)	(24)
Certain other non-operational items	(47)	(33)
Foreign exchange/commodity timing differences in income from operations	(80)	21
Income from operations	373	590
Interest and dividend income	18	19
Interest and other finance expense	(22)	(62)
Non-operational pension (cost) credit	36	23
Income from continuing operations before taxes	405	570
Provision for taxes	(79)	(155)
Income from continuing operations, net of tax	326	415
Income from discontinued operations, net of tax	54	149
Net income	380	564

(1) Amounts in the three months ended March 31, 2020 and 2019, include \$16 million and \$19 million of implementation costs in relation to the OS program, respectively.

Reconciliation of Operational EBITA margin by business

(\$ in millions, unless otherwise indicated)	Three months ended March 31, 2020					
	Industrial			Robotics & Discrete	Other and Intersegment	Corporate and
	Electrification	Automation	Motion	Automation	elimination	Consolidated
Total revenues	2,773	1,462	1,510	671	(200)	6,216
Foreign exchange/commodity timing differences in total revenues:						
Unrealized gains and losses on derivatives	38	29	10	6	3	86
Realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized	1	8	–	–	(2)	7
Unrealized foreign exchange movements on receivables (and related assets)	(29)	(20)	(13)	(8)	2	(68)
Operational revenues	2,783	1,479	1,507	669	(197)	6,241
Income (loss) from operations	199	124	191	32	(173)	373
Acquisition-related amortization	28	1	13	19	4	65
Restructuring, related and implementation costs	15	3	2	7	13	40
Changes in obligations related to divested businesses	–	–	–	–	–	–
Gains and losses from sale of businesses	1	–	–	–	–	1
Fair value adjustment on assets and liabilities held for sale	19	–	–	–	–	19
Acquisition- and divestment-related expenses and integration costs	11	–	–	–	–	11
Certain other non-operational items	–	–	5	1	41	47
Foreign exchange/commodity timing differences in income from operations:						
Unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives)	42	18	19	2	(7)	74
Realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized	–	6	–	–	(2)	4
Unrealized foreign exchange movements on receivables/payables (and related assets/liabilities)	3	(8)	–	(2)	9	2
Operational EBITA	318	144	230	59	(115)	636
Operational EBITA margin (%)	11.4%	9.7%	15.3%	8.8%	n.a.	10.2%

In the three months ended March 31, 2020, Certain other non-operational items in the table above includes the following:

(\$ in millions, unless otherwise indicated)	Three months ended March 31, 2020					
	Industrial			Robotics & Discrete	Corporate and Other	Consolidated
	Electrification	Automation	Motion	Automation	and Other	Consolidated
Certain other non-operational items:						
Costs for planned divestment of Power Grids	–	–	–	–	44	44
Business transformation costs	–	–	5	1	1	7
Executive Committee transition costs	–	–	–	–	(2)	(2)
Other non-operational items	–	–	–	–	(2)	(2)
Total	–	–	5	1	41	47

(\$ in millions, unless otherwise indicated)	Three months ended March 31, 2019					
	Electrification		Industrial		Robotics & Discrete	Corporate and Other and Intersegment
	Automation	Motion	Automation	elimination	Consolidated	
Total revenues	3,057	1,518	1,605	851	(184)	6,847
Foreign exchange/commodity timing differences in total revenues:						
Unrealized gains and losses on derivatives	(1)	1	–	(2)	(1)	(3)
Realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized	–	(4)	–	(1)	1	(4)
Unrealized foreign exchange movements on receivables (and related assets)	(4)	3	–	(1)	(2)	(4)
Operational revenues	3,052	1,518	1,605	847	(186)	6,836
Income (loss) from operations	297	195	251	77	(230)	590
Acquisition-related amortization	29	1	14	20	4	68
Restructuring, related and implementation costs	40	5	3	1	19	68
Changes in obligations related to divested businesses	–	–	–	–	3	3
Gains and losses from sale of businesses	1	–	–	–	–	1
Acquisition- and divestment-related expenses and integration costs	22	–	–	–	2	24
Certain other non-operational items	1	2	3	–	27	33
Foreign exchange/commodity timing differences in income from operations:						
Unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives)	(8)	5	(6)	(2)	5	(6)
Realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized	2	(1)	–	–	–	1
Unrealized foreign exchange movements on receivables/payables (and related assets/liabilities)	(7)	(2)	(2)	(1)	(4)	(16)
Operational EBITA	377	205	263	95	(174)	766
Operational EBITA margin (%)	12.4%	13.5%	16.4%	11.2%	n.a.	11.2%

In the three months ended March 31, 2019, Certain other non-operational items in the table above includes the following:

(\$ in millions, unless otherwise indicated)	Three months ended March 31, 2019					
	Electrification		Industrial		Robotics & Discrete	Corporate and Other
	Automation	Motion	Automation	Automation	Consolidated	
Certain other non-operational items:						
Costs for planned divestment of Power Grids	–	–	–	–	20	20
Regulatory, compliance and legal costs	–	–	–	–	8	8
Business transformation costs	–	–	3	–	–	3
Other non-operational items	1	2	–	–	(1)	2
Total	1	2	3	–	27	33

Operational EPS

Definition

Operational EPS

Operational EPS is calculated as Operational net income divided by the weighted-average number of shares outstanding used in determining basic earnings per share.

Operational net income

Operational net income is calculated as Net income attributable to ABB adjusted for the following:

- (i) acquisition-related amortization,
- (ii) restructuring, related and implementation costs
- (iii) non-operational pension cost (credit),
- (iv) changes in obligations related to divested businesses,
- (v) changes in pre-acquisition estimates,
- (vi) gains and losses from sale of businesses (including fair value adjustment on assets and liabilities held for sale),
- (vii) acquisition- and divestment-related expenses and integration costs,
- (viii) certain other non-operational items,
- (ix) foreign exchange/commodity timing differences in income from operations consisting of: (a) unrealized gains and losses on derivatives (foreign exchange, commodities, embedded derivatives), (b) realized gains and losses on derivatives where the underlying hedged transaction has not yet been realized, and (c) unrealized foreign exchange movements on receivables/payables (and related assets/liabilities),
- (x) The amount of income tax on operational adjustments either estimated using the Adjusted Group effective tax rate or in certain specific cases, computed using the actual income tax effects of the relevant item in (i) to (ix) above, and
- (xi) Certain other non-operational amounts recorded within Provision for taxes.

Adjustment for certain non-operational amounts recorded within Provision for taxes

Adjustments are made for certain amounts recorded within Provision for taxes primarily when the amount recorded has no corresponding underlying transaction recorded within income from continuing or discontinued operations before taxes. This would include the amounts recorded in connection with internal reorganizations of the corporate structure of the Company.

Restructuring, related and implementation costs

Restructuring, related and implementation costs consists of restructuring and other related expenses, as well as internal and external costs relating to the implementation of group-wide restructuring programs.

Adjusted Group effective tax rate

The Adjusted Group effective tax rate is computed by dividing a combined adjusted provision for taxes (for both continuing and discontinued operations) by a combined adjusted pre-tax income (from both continuing and discontinued operations). Certain amounts recorded in income before taxes and the related provision for taxes (primarily gains and losses from sale of businesses) are excluded to arrive at the computation. Amounts recorded in Provision for taxes for certain non-operational items and quantified in the table below are also excluded from the computation of the Adjusted Group effective tax rate.

Constant currency Operational EPS adjustment and Operational EPS growth rate (constant currency)

We compute the constant currency operational net income using the relevant monthly exchange rates which were in effect during 2019 and any difference in computed Operational net income is divided by the relevant weighted-average number of shares outstanding to identify the constant currency Operational EPS adjustment.

Reconciliation

	Three months ended March 31,		
(\$ in millions, except per share data in \$)	2020	2019	Growth ⁽³⁾
Net income (attributable to ABB)	376	535	-30%
Non-operational adjustments:			
Acquisition-related amortization	65	68	
Restructuring, related and implementation costs ⁽¹⁾	40	68	
Non-operational pension cost (credit)	(36)	(23)	
Changes in obligations related to divested businesses	–	3	
Gains and losses from sale of businesses	1	1	
Fair value adjustment on assets and liabilities held for sale	19	–	
Acquisition- and divestment-related expenses and integration costs	11	24	
Certain other non-operational items	47	33	
Foreign exchange/commodity timing differences in income from operations	80	(21)	
Non-operational adjustments in discontinued operations	77	(1)	
Tax on non-operational adjustments ⁽²⁾	(47)	(40)	
Operational net income	633	647	-2%
Weighted-average number of shares outstanding (in millions)	2,134	2,132	
Operational EPS	0.30	0.30	-2%
Constant currency Operational EPS adjustment	–	–	
Operational EPS (constant currency basis)	0.30	0.30	-1%

(1) Amounts in the three months ended March 31, 2020 and 2019, include \$16 million and \$19 million of implementation costs in relation to the OS program, respectively.

(2) Tax amount is computed by applying the Adjusted Group effective tax rate to the operational adjustments, except for certain costs for the planned divestment of the Power Grids business and gains and losses from sale of businesses (including fair value adjustment on assets and liabilities held for sale), for which the actual provision for taxes resulting from the gain or loss has been computed.

(3) Growth is computed using unrounded EPS amounts.

Net debt

Definition

Net debt

Net debt is defined as Total debt less Cash and marketable securities.

Total debt

Total debt is the sum of Short-term debt and current maturities of long-term debt, and Long-term debt.

Cash and marketable securities

Cash and marketable securities is the sum of Cash and equivalents, and Marketable securities and short-term investments.

Reconciliation

(\$ in millions)	March 31, 2020	December 31, 2019
Short-term debt and current maturities of long-term debt	5,913	2,287
Long-term debt	6,830	6,772
Total debt	12,743	9,059
Cash and equivalents	5,971	3,544
Marketable securities and short-term investments	551	566
Cash and marketable securities	6,522	4,110
Net debt	6,221	4,949

Net working capital as a percentage of revenues

Definition

Net working capital as a percentage of revenues

Net working capital as a percentage of revenues is calculated as Net working capital divided by Adjusted revenues for the trailing twelve months.

Net working capital

Net working capital is the sum of (i) receivables, net, (ii) contract assets, (iii) inventories, net, and (iv) prepaid expenses; less (v) accounts payable, trade, (vi) contract liabilities, and (vii) other current liabilities (excluding primarily: (a) income taxes payable, (b) current derivative liabilities, and (c) pension and other employee benefits); and including the amounts related to these accounts which have been presented as either assets or liabilities held for sale but excluding any amounts included in discontinued operations.

Adjusted revenues for the trailing twelve months

Adjusted revenues for the trailing twelve months includes total revenues recorded by ABB in the twelve months preceding the relevant balance sheet date adjusted to eliminate revenues of divested businesses and the estimated impact of annualizing revenues of certain acquisitions which were completed in the same trailing twelve-month period.

Reconciliation

(\$ in millions, unless otherwise indicated)	March 31, 2020	March 31, 2019
Net working capital:		
Receivables, net	6,288	6,499
Contract assets	1,038	1,094
Inventories, net	4,358	4,459
Prepaid expenses	266	252
Accounts payable, trade	(4,170)	(4,081)
Contract liabilities	(1,665)	(1,690)
Other current liabilities ⁽¹⁾	(2,797)	(3,323)
Net working capital	3,318	3,210
Total revenues for the three months ended:		
March 31, 2020 / 2019	6,216	6,847
December 31, 2019 / 2018	7,068	7,395
September 30, 2019 / 2018	6,892	7,095
June 30, 2019 / 2018	7,171	6,731
Adjustment to annualize/eliminate revenues of certain acquisitions/divestments	(404)	495
Adjusted revenues for the trailing twelve months	26,943	28,563
Net working capital as a percentage of revenues (%)	12.3%	11.2%

(1) Amounts exclude \$717 million and \$568 million at March 31, 2020 and 2019, respectively, related primarily to (a) income taxes payable, (b) current derivative liabilities, and (c) pension and other employee benefits.

Free cash flow conversion to net income

Definition

Free cash flow conversion to net income

Free cash flow conversion to net income is calculated as free cash flow divided by Net income attributable to ABB.

Free cash flow

Free cash flow is calculated as net cash provided by operating activities adjusted for: (i) purchases of property, plant and equipment and intangible assets, and (ii) proceeds from sales of property, plant and equipment.

Free cash flow for the trailing twelve months

Free cash flow for the trailing twelve months includes free cash flow recorded by ABB in the twelve months preceding the relevant balance sheet date.

Net income for the trailing twelve months

Net income for the trailing twelve months includes net income recorded by ABB in the twelve months preceding the relevant balance sheet date.

Free cash flow conversion to net income

(\$ in millions, unless otherwise indicated)	Twelve months to	
	March 31, 2020	December 31, 2019
Net cash provided by operating activities	2,004	2,325
Adjusted for the effects of:		
Continuing operations:		
Purchases of property, plant and equipment and intangible assets	(718)	(762)
Proceeds from sale of property, plant and equipment	57	82
Discontinued operations:		
Purchases of property, plant and equipment and intangible assets	(157)	(167)
Proceeds from sale of property, plant and equipment	9	8
Free cash flow	1,195	1,486
Net income attributable to ABB	1,280	1,439
Free cash flow conversion to net income	93%	103%

Reconciliation of the trailing twelve months to March 31, 2020

(\$ in millions)	Continuing operations		Discontinued operations		Net income attributable to ABB	
	Net cash provided by operating activities	Purchases of property, plant and equipment and intangible assets	Proceeds from sale of property, plant and equipment	Purchases of property, plant and equipment and intangible assets	Proceeds from sale of property, plant and equipment	
Q2 2019	–	(169)	6	(38)	1	64
Q3 2019	670	(152)	13	(38)	8	515
Q4 2019	1,911	(234)	15	(48)	(1)	325
Q1 2020	(577)	(163)	23	(33)	1	376
Total for the trailing twelve months to						
March 31, 2020	2,004	(718)	57	(157)	9	1,280

Net finance expenses

Definition

Net finance expenses is calculated as Interest and dividend income less Interest and other finance expense.

Reconciliation

(\$ in millions)	Three months ended March 31,	
	2020	2019
Interest and dividend income	18	19
Interest and other finance expense	(22)	(62)
Net finance expense	(4)	(43)

Book-to-bill ratio

Definition

Book-to-bill ratio is calculated as Orders received divided by Total revenues.

Reconciliation

(\$ in millions, unless otherwise indicated)	Three months ended March 31,	
	2020	2019
Orders received	7,346	7,613
Total revenues	6,216	6,847
Book-to-bill ratio	1.18	1.11

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The ABB logo is displayed in its signature red color. The letters 'A', 'B', and 'B' are arranged in a staggered, overlapping fashion. The 'A' is positioned at the top left, the first 'B' is at the bottom left, and the second 'B' is at the top right, partially overlapping the first 'B'.