

July 21, 2022

Q2 2022 Financial information

Financial InformationContents

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Key Figures

		_	CHAI	NGE
(\$ in millions, unless otherwise indicated)	Q2 2022	Q2 2021	US\$	Comparable ⁽¹⁾
Orders	8,807	7,989	10%	20%
Order backlog (end June)	19,477	15,424	26%	37%
Revenues	7,251	7,449	-3%	6%
Gross Profit	2,290	2,508	-9%	
as % of revenues	31.6%	33.7%	-2.1 pts	
Income from operations	587	1,094	-46%	
Operational EBITA ⁽¹⁾	1,136	1,113	2%	9% ⁽²⁾
as % of operational revenues ⁽¹⁾	15.5%	15.0%	+0.5 pts	
Income from continuing operations, net of tax	406	789	-49%	
Net income attributable to ABB	379	752	-50%	
Basic earnings per share (\$)	0.20	0.37	-47% ⁽³⁾	
Cash flow from operating activities ⁽⁴⁾	382	663	-42%	
Cash flow from operating activities in continuing operations	385	663	-42%	

			CHAN	NGE
(\$ in millions, unless otherwise indicated)	H1 2022	H1 2021	US\$	Comparable ⁽¹⁾
Orders	18,180	15,745	15%	24%
Revenues	14,216	14,350	-1%	7%
Gross Profit	4,571	4,776	-4%	
as % of revenues	32.2%	33.3%	-1.1 pts	
Income from operations	1,444	1,891	-24%	
Operational EBITA ⁽¹⁾	2,133	2,072	3%	9% ⁽²⁾
as % of operational revenues ⁽¹⁾	14.9%	14.4%	+0.5 pts	
Income from continuing operations, net of tax	1,049	1,340	-22%	
Net income attributable to ABB	983	1,254	-22%	
Basic earnings per share (\$)	0.51	0.62	-18% ⁽³⁾	
Cash flow from operating activities (4)	(191)	1,206	n.a.	
Cash flow from operating activities in continuing operations	(179)	1,186	n.a.	

- (1) For a reconciliation of non-GAAP measures see "Supplemental Reconciliations and Definitions" on page 35.
- (2) Constant currency (not adjusted for portfolio changes).
- (3) EPS growth rates are computed using unrounded amounts.
- $(4) \ \ \, {\sf Cash flow from operating activities includes both continuing and discontinued operations}. \\$

					CHANGE	
(\$ in millions, unless otherwise indicated)		Q2 2022	Q2 2021	US\$	Local	Comparable
Orders	ABB Group	8,807	7,989	10%	17%	20%
	Electrification	4,037	3,693	9%	16%	16%
	Motion	2,079	1,947	7%	14%	26%
	Process Automation	1,819	1,555	17%	25%	25%
	Robotics & Discrete Automation	1,109	968	15%	24%	23%
	Corporate and Other					
	(incl. intersegment eliminations)	(237)	(174)			
Order backlog (end June)	ABB Group	19,477	15,424	26%	36%	37%
	Electrification	6,706	5,029	33%	42%	42%
	Motion	4,568	3,558	28%	40%	43%
	Process Automation	6,170	5,980	3%	12%	12%
	Robotics & Discrete Automation	2,728	1,501	82%	98%	97%
	Corporate and Other					
	(incl. intersegment eliminations)	(695)	(644)			
Revenues	ABB Group	7,251	7,449	-3%	4%	6%
	Electrification	3,531	3,406	4%	10%	10%
	Motion	1,626	1,850	-12%	-6%	3%
	Process Automation	1,529	1,540	-1%	7%	7%
	Robotics & Discrete Automation	732	832	-12%	-5%	-5%
	Corporate and Other					
	(incl. intersegment eliminations)	(167)	(179)			
Income from operations	ABB Group	587	1,094			
	Electrification	465	549			
	Motion	231	303			
	Process Automation	175	190			
	Robotics & Discrete Automation	43	74			
	Corporate and Other					
	(incl. intersegment eliminations)	(327)	(22)			
Income from operations %	ABB Group	8.1%	14.7%			
	Electrification	13.2%	16.1%			
	Motion	14.2%	16.4%			
	Process Automation	11.4%	12.3%			
	Robotics & Discrete Automation	5.9%	8.9%			
Operational EBITA	ABB Group	1,136	1,113	2%	9%	
	Electrification	599	592	1%	9%	
	Motion	266	325	-18%	-13%	
	Process Automation	224	192	17%	28%	
	Robotics & Discrete Automation	60	96	-38%	-29%	
	Corporate and Other					
	(incl. intersegment eliminations)	(13)	(92)			
Operational EBITA %	ABB Group	15.5%	15.0%			
	Electrification	16.9%	17.4%			
	Motion	16.4%	17.7%			
	Process Automation	14.3%	12.5%			
	Robotics & Discrete Automation	8.2%	11.5%			
Cash flow from operating activities	ABB Group	382	663			
asimow nom operating activities	Electrification	393	511			
	Motion	241	223			
	Process Automation	193	228			
	Robotics & Discrete Automation	56	78			
	Corporate and Other					
	(incl. intersegment eliminations)	(498)	(377)			
	Discontinued operations	(3)	· ·			

				(CHANGE	
(\$ in millions, unless otherwise indicated)		H1 2022	H1 2021	US\$	Local	Comparable
Orders	ABB Group	18,180	15,745	15%	21%	24%
	Electrification	8,434	7,224	17%	22%	22%
	Motion	4,281	3,864	11%	17%	29%
	Process Automation	3,511	3,211	9%	15%	15%
	Robotics & Discrete Automation	2,417	1,809	34%	42%	40%
	Corporate and Other					
	(incl. intersegment eliminations)	(463)	(363)			
Order backlog (end June)	ABB Group	19,477	15,424	26%	36%	37%
	Electrification	6,706	5,029	33%	42%	42%
	Motion	4,568	3,558	28%	40%	43%
	Process Automation	6,170	5,980	3%	12%	12%
	Robotics & Discrete Automation	2,728	1,501	82%	98%	97%
	Corporate and Other					
	(incl. intersegment eliminations)	(695)	(644)			
Revenues	ABB Group	14,216	14,350	-1%	5%	7%
	Electrification	6,858	6,546	5%	10%	10%
	Motion	3,198	3,517	-9%	-4%	6%
	Process Automation	3,035	2,947	3%	9%	9%
	Robotics & Discrete Automation	1,462	1,685	-13%	-8%	-9%
	Corporate and Other					
	(incl. intersegment eliminations)	(337)	(345)			
ncome from operations	ABB Group	1,444	1,891			
	Electrification	971	989			
	Motion	485	568			
	Process Automation	326	337			
	Robotics & Discrete Automation	65	156			
	Corporate and Other					
	(incl. intersegment eliminations)	(403)	(159)			
ncome from operations %	ABB Group	10.2%	13.2%			
	Electrification	14.2%	15.1%			
	Motion	15.2%	16.2%			
	Process Automation	10.7%	11.4%			
	Robotics & Discrete Automation	4.4%	9.3%			
Operational EBITA	ABB Group	2,133	2,072	3%	9%	
	Electrification	1,109	1,103	1%	7%	
	Motion	540	614	-12%	-8%	
	Process Automation	420	347	21%	29%	
	Robotics & Discrete Automation	109	201	-46%	-40%	
	Corporate and Other					
	(incl. intersegment eliminations)	(45)	(193)			
Operational EBITA %	ABB Group	14.9%	14.4%			
	Electrification	16.1%	16.8%			
	Motion	16.9%	17.4%			
	Process Automation	13.7%	11.8%			
	Robotics & Discrete Automation	7.4%	11.9%			
Cash flow from operating activities	ABB Group	(191)	1,206			
	Electrification	432	830			
	Motion	239	547			
	Process Automation	253	461			
	Robotics & Discrete Automation	27	189			
	Corporate and Other					
	(incl. intersegment eliminations)	(1,130)	(841)			
-	Discontinued operations	(12)	20			

							Proc	ess	Robotics 8	Discrete
	AB	ВВ	Electrifi	ication	Mot	ion	Autom	ation	Autom	ation
(\$ in millions, unless otherwise indicated)	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21
Revenues	7,251	7,449	3,531	3,406	1,626	1,850	1,529	1,540	732	832
Foreign exchange/commodity timing										
differences in total revenues	70	(13)	22	2	(4)	(11)	32	(4)	1	2
Operational revenues	7,321	7,436	3,553	3,408	1,622	1,839	1,561	1,536	733	834
Income from operations	587	1,094	465	549	231	303	175	190	43	74
Acquisition-related amortization	59	64	30	29	7	13	1	1	19	21
Restructuring, related and										
implementation costs ⁽¹⁾	264	18	8	4	_	4	_	10	2	_
Changes in obligations related to										
divested businesses	(3)	4	_	_	_	_	_	_	_	_
Changes in pre-acquisition estimates	(2)	2	-	2	_	_	-	_	(2)	_
Gains and losses from sale of businesses	4	(12)	-	1	4	(1)	-	(13)	-	_
Acquisition- and divestment-related										
expenses and integration costs	50	20	10	12	3	4	36	3	2	_
Other income/expense relating to the										
Power Grids joint venture	2	2	_	-	_	-	-	_	-	-
Certain other non-operational items	65	(86)	22	(9)	-	1	-	2	1	_
Foreign exchange/commodity timing										
differences in income from operations	110	7	64	4	21	1	12	(1)	(5)	1
Operational EBITA	1,136	1,113	599	592	266	325	224	192	60	96
Operational EBITA margin (%)	15.5%	15.0%	16.9%	17.4%	16.4%	17.7%	14.3%	12.5%	8.2%	11.5%

						Proc	ess	Robotics 8	Discrete
AB	В	Electrifi	ication	Mot	ion	Autom	ation	Autom	ation
H1 22	H1 21	H1 22	H1 21	H1 22	H1 21	H1 22	H1 21	H1 22	H1 21
14,216	14,350	6,858	6,546	3,198	3,517	3,035	2,947	1,462	1,685
67	20	12	12	(1)	8	31	1	6	(1)
14,283	14,370	6,870	6,558	3,197	3,525	3,066	2,948	1,468	1,684
1,444	1,891	971	989	485	568	326	337	65	156
119	129	61	58	15	26	2	2	40	41
280	53	10	21	8	5	5	13	3	5
(17)	6	-	-	-	-	-	-	-	-
(1)	8	1	8	-	_	-	_	(2)	_
4	(9)	-	4	4	(1)	-	(13)	-	_
109	30	29	18	8	7	69	4	3	-
37	19	_	-	_	-	-	-	-	-
63	(74)	(8)	(15)	-	1	-	2	1	_
95	19	45	20	20	8	18	2	(1)	(1)
2,133	2,072	1,109	1,103	540	614	420	347	109	201
14 90/	14 404	16 10/	16 90/	16 00/	17 /10/	12 70/	11 00/	7 404	11.9%
	14,216 67 14,283 1,444 119 280 (17) (1) 4 109 37 63	14,216 14,350 67 20 14,283 14,370 1,444 1,891 119 129 280 53 (17) 6 (1) 8 4 (9) 109 30 37 19 63 (74) 95 19 2,133 2,072	H1 22 H1 21 H1 22 14,216 14,350 6,858 67 20 12 14,283 14,370 6,870 1,444 1,891 971 119 129 61 280 53 10 (17) 6 - (1) 8 1 4 (9) - 109 30 29 37 19 - 63 (74) (8) 95 19 45 2,133 2,072 1,109	H1 22 H1 21 H1 22 H1 21 14,216 14,350 6,858 6,546 67 20 12 12 14,283 14,370 6,870 6,558 1,444 1,891 971 989 119 129 61 58 280 53 10 21 (17) 6 - - (1) 8 1 8 4 (9) - 4 109 30 29 18 37 19 - - 63 (74) (8) (15) 95 19 45 20 2,133 2,072 1,109 1,103	H1 22 H1 21 H1 22 H1 21 H1 22 14,216 14,350 6,858 6,546 3,198 67 20 12 12 (1) 14,283 14,370 6,870 6,558 3,197 1,444 1,891 971 989 485 119 129 61 58 15 280 53 10 21 8 (17) 6 - - - (1) 8 1 8 - 4 (9) - 4 4 109 30 29 18 8 37 19 - - - 63 (74) (8) (15) - 95 19 45 20 20 2,133 2,072 1,109 1,103 540	H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 14,216 14,350 6,858 6,546 3,198 3,517 67 20 12 12 (1) 8 14,283 14,370 6,870 6,558 3,197 3,525 1,444 1,891 971 989 485 568 119 129 61 58 15 26 280 53 10 21 8 5 (17) 6 - - - - (1) 8 1 8 - - (1) 8 1 8 - - 4 (9) - 4 4 (1) 109 30 29 18 8 7 37 19 - - - - 63 (74) (8) (15) - 1 <td>ABB Electrification Motion Autom H1 22 H1 21 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21</td> <td>H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 H2 24 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 <th< td=""><td>ABB Electrification Motion Automation Automation</td></th<></td>	ABB Electrification Motion Autom H1 22 H1 21 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21	H1 22 H1 21 H2 24 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 21 H1 22 H1 21 H1 22 H1 21 H1 22 H1 21 H1 21 <th< td=""><td>ABB Electrification Motion Automation Automation</td></th<>	ABB Electrification Motion Automation Automation

 $^{{\}rm (1)} \quad {\rm Includes\ impairment\ of\ certain\ assets}.$

Depreciation and Amortization

							Proc	ess	Robotics & Discrete		
	ABB		Electrification		Motion		Automation		Automation		
(\$ in millions)	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21	Q2 22	Q2 21	
Depreciation	136	148	67	68	26	32	16	19	15	15	
Amortization	71	82	35	39	9	15	3	3	20	21	
including total acquisition-related amortization of:	59	64	30	29	7	13	1	1	19	21	

							Proc	ess	Robotics & Discrete	
	AE	ВВ	Electrif	ication	Mot	ion	Autom	ation	Autom	ation
(\$ in millions)	H1 22	H1 21	H1 22	H1 21	H1 22	H1 21	H1 22	H1 21	H1 22	H1 21
Depreciation	272	292	134	132	53	64	34	38	30	28
Amortization	145	165	72	76	18	29	6	6	41	42
including total acquisition-related amortization of:	119	129	61	58	15	26	2	2	40	41

Orders received and revenues by region

(\$ in millions, unless otherwise indicated)	Orders r	Orders received		CHANGE			Revenues		CHANGE	
					Com-					Com-
	Q2 22	Q2 21	US\$	Local	parable	Q2 22	Q2 21	US\$	Local	parable
Europe	2,958	2,954	0%	15%	15%	2,508	2,697	-7%	7%	7%
The Americas	3,050	2,473	23%	24%	33%	2,397	2,284	5%	6%	14%
of which United States	2,234	1,846	21%	21%	32%	1,746	1,676	4%	4%	14%
Asia, Middle East and Africa	2,799	2,562	9%	15%	15%	2,346	2,468	-5%	0%	0%
of which China	1,409	1,322	7%	9%	10%	1,163	1,313	-11%	-9%	-9%
ABB Group	8,807	7,989	10%	17%	20%	7,251	7,449	-3%	4%	6%

(\$ in millions, unless otherwise indicated)	Orders r	eceived	(CHANGE		Reve	nues	(CHANGE	
					Com-					Com-
	H1 22	H1 21	US\$	Local	parable	H1 22	H1 21	US\$	Local	parable
Europe	6,492	6,056	7%	19%	19%	5,026	5,248	-4%	7%	7%
The Americas	5,947	4,720	26%	26%	36%	4,566	4,327	6%	7%	15%
of which United States	4,459	3,525	26%	27%	39%	3,328	3,208	4%	4%	14%
Asia, Middle East and Africa	5,741	4,969	16%	19%	19%	4,624	4,775	-3%	0%	0%
of which China	2,946	2,521	17%	17%	18%	2,263	2,489	-9%	-9%	-8%
ABB Group	18,180	15,745	15%	21%	24%	14,216	14,350	-1%	5%	7%



Consolidated Financial Information

ABB Ltd Consolidated Income Statements (unaudited)

	Six montl	hs ended	Three mon	ths ended
(\$ in millions, except per share data in \$)	Jun. 30, 2022	Jun. 30, 2021	Jun. 30, 2022	Jun. 30, 2021
Sales of products	11,762	11,874	6,013	6,167
Sales of services and other	2,454	2,476	1,238	1,282
Total revenues	14,216	14,350	7,251	7,449
Cost of sales of products	(8,222)	(8,108)	(4,254)	(4,184)
Cost of services and other	(1,423)	(1,466)	(707)	(757)
Total cost of sales	(9,645)	(9,574)	(4,961)	(4,941)
Gross profit	4,571	4,776	2,290	2,508
Selling, general and administrative expenses	(2,556)	(2,577)	(1,317)	(1,314)
Non-order related research and development expenses	(572)	(601)	(295)	(308)
Other income (expense), net	1	293	(91)	208
Income from operations	1,444	1,891	587	1,094
Interest and dividend income	33	26	20	15
Interest and other finance expense	(62)	(91)	(40)	(36)
Non-operational pension (cost) credit	68	88	32	38
Income from continuing operations before taxes	1,483	1,914	599	1,111
Income tax expense	(434)	(574)	(193)	(322)
Income from continuing operations, net of tax	1,049	1,340	406	789
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)
Net income	1,029	1,304	397	781
Net income attributable to noncontrolling interests	(46)	(50)	(18)	(29)
Net income attributable to ABB	983	1,254	379	752
Amounts attributable to ABB shareholders:				
Income from continuing operations, net of tax	1,003	1,290	388	760
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)
Net income	983	1,254	379	752
Basic earnings per share attributable to ABB shareholders:				
Income from continuing operations, net of tax	0.52	0.64	0.20	0.38
Loss from discontinued operations, net of tax	(0.01)	(0.02)	0.00	0.00
Net income	0.51	0.62	0.20	0.37
Diluted earnings per share attributable to ABB shareholders:				
Income from continuing operations, net of tax	0.52	0.63	0.20	0.37
Loss from discontinued operations, net of tax	(0.01)	(0.02)	0.00	0.00
Net income	0.51	0.62	0.20	0.37
Weighted-average number of shares outstanding (in millions) used to compute:				
Basic earnings per share attributable to ABB shareholders	1,922	2,015	1,909	2,016
Diluted earnings per share attributable to ABB shareholders	1,935	2,033	1,918	2,031

Due to rounding, numbers presented may not add to the totals provided. $\label{eq:condition}$

ABB Ltd Condensed Consolidated Statements of Comprehensive Income (unaudited)

	Six montl	hs ended	Three months ended		
(\$ in millions)	Jun. 30, 2022	Jun. 30, 2021	Jun. 30, 2022	Jun. 30, 2021	
Total comprehensive income, net of tax	708	1,206	131	881	
Total comprehensive income attributable to noncontrolling interests, net of tax	(26)	(55)	(3)	(31)	
Total comprehensive income attributable to ABB shareholders, net of tax	682	1,151	128	850	

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

ABB Ltd Consolidated Balance Sheets (unaudited)

(\$ in millions)	Jun. 30, 2022	Dec. 31, 2021
Cash and equivalents	2,412	4,159
Restricted cash	23	30
Marketable securities and short-term investments	945	1,170
Receivables, net	6,960	6,551
Contract assets	965	990
Inventories, net	5,595	4,880
Prepaid expenses	262	206
Other current assets	474	573
Current assets held for sale and in discontinued operations	122	136
Total current assets	17,758	18,695
Total callent assets	21,130	10,033
Restricted cash, non-current	301	300
Property, plant and equipment, net	3,885	4,045
	783	895
Operating lease right-of-use assets		
Investments in equity-accounted companies	1,617	1,670
Prepaid pension and other employee benefits	908	892
Intangible assets, net	1,474	1,561
Goodwill	10,452	10,482
Deferred taxes	1,272	1,177
Other non-current assets	448	543
Total assets	38,898	40,260
Accounts payable, trade	4,805	4,921
Contract liabilities	2,141	1,894
Short-term debt and current maturities of long-term debt	2,830	1,384
Current operating leases	222	230
Provisions for warranties	972	1,005
Other provisions	1,144	1,386
Other current liabilities	4,277	4,367
Current liabilities held for sale and in discontinued operations	306	381
Total current liabilities	16,697	15,568
Long-term debt	5,086	4,177
Non-current operating leases	586	689
Pension and other employee benefits	925	1,025
Deferred taxes	696	685
Other non-current liabilities	2,214	2,116
Non-current liabilities held for sale and in discontinued operations	28	43
Total liabilities	26,232	24,303
Commitments and contingencies		
Redeemable noncontrolling interest	80	_
Stockholders' equity:		
Common stock, CHF 0.12 par value		
(1,965 million and 2,053 million shares issued at June 30, 2022, and December 31, 2021, respectively)	171	178
Additional paid-in capital	12	22
Retained earnings	18,767	22,477
Accumulated other comprehensive loss	(4,389)	(4,088)
Treasury stock, at cost	(4,503)	(+,000)
(72 million and 95 million shares at June 30, 2022, and December 31, 2021, respectively)	(2.290)	(3.010)
	(2,290)	(3,010)
Total ABB stockholders' equity	12,271	15,579
Noncontrolling interests Table to all hald and a wife.	315	378
Total stockholders' equity	12,586	15,957
Total liabilities and stockholders' equity	38,898	40,260

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

ABB Ltd Consolidated Statements of Cash Flows (unaudited)

	Six month		Three mon	ths ended
(\$ in millions)	Jun. 30, 2022	Jun. 30, 2021	Jun. 30, 2022	Jun. 30, 2021
Operating activities:				
Net income	1,029	1,304	397	781
Loss from discontinued operations, net of tax	20	36	9	8
Adjustments to reconcile net income (loss) to				
net cash provided by operating activities:				
Depreciation and amortization	417	457	207	230
Changes in fair values of investments	(15)	(113)	9	(103)
Pension and other employee benefits	(83)	(94)	(37)	(44)
Deferred taxes	(148)	109	(32)	50
Loss from equity-accounted companies	62	57	14	22
Net loss (gain) from derivatives and foreign exchange	77	44	105	24
Net loss (gain) from sale of property, plant and equipment	(55)	(15)	(23)	(4)
Other	67	29	31	9
Changes in operating assets and liabilities:				
Trade receivables, net	(621)	(414)	(304)	(412)
Contract assets and liabilities	252	(147)	145	(57)
Inventories, net	(1,083)	(293)	(541)	(125)
Accounts payable, trade	80	309	73	267
Accrued liabilities	(255)	53	135	129
Provisions, net	126	(60)	179	(61)
Income taxes payable and receivable	(52)	(56)	(66)	(6)
Other assets and liabilities, net	3	(20)	84	(45)
Net cash provided by (used in) operating activities – continuing operations	(179)	1,186	385	663
Net cash provided by (used in) operating activities – discontinued operations	(12)	20	(3)	_
Net cash provided by (used in) operating activities	(191)	1,206	382	663
Investing activities:		·		
Purchases of investments	(256)	(347)	(128)	(38)
Purchases of investments Purchases of property, plant and equipment and intangible assets	(338)	(293)	(151)	(151)
Acquisition of businesses (net of cash acquired)	(550)	(255)	(131)	(151)
and increases in cost- and equity-accounted companies	(179)	(28)	(34)	(24)
Proceeds from sales of investments	506	1,321	201	930
	500	80	201	930
Proceeds from naturity of investments	66	23	31	3
Proceeds from sales of property, plant and equipment	00	23	31	3
Proceeds from sales of businesses (net of transaction costs	(12)	47	(12)	40
and cash disposed) and cost- and equity-accounted companies	(13)		(13)	49
Net cash from settlement of foreign currency derivatives	56	(72)	(10)	(11)
Other investing activities	(8)	(14)	(18)	(6)
Net cash provided by (used in) investing activities – continuing operations	(166)	717	(122)	752
Net cash used in investing activities – discontinued operations	(91)	(70)	(70)	(26)
Net cash provided by (used in) investing activities	(257)	647	(192)	726
Financing activities:				
Net changes in debt with original maturities of 90 days or less	1,191	274	(114)	187
Increase in debt	3,181	1,004	639	13
Repayment of debt	(1,483)	(750)	(1,442)	(703)
Delivery of shares	370	766	-	6
Purchase of treasury stock	(2,661)	(1,971)	(1,100)	(585)
Dividends paid	(1,698)	(1,726)	(809)	(882)
Dividends paid to noncontrolling shareholders	(76)	(92)	(75)	(91)
Other financing activities	(53)	6	(19)	42
Net cash used in financing activities – continuing operations	(1,229)	(2,489)	(2,920)	(2,013)
Net cash provided by financing activities – discontinued operations	-	-	-	-
Net cash used in financing activities	(1,229)	(2,489)	(2,920)	(2,013)
Effects of exchange rate changes on cash and equivalents and restricted cash	(76)	(34)	(80)	17
Net change in cash and equivalents and restricted cash	(1,753)	(670)	(2,810)	(607)
Cash and equivalents and restricted cash, beginning of period	4,489	3,901	5,546	3,838
Cash and equivalents and restricted cash, end of period	2,736	3,231	2,736	3,231
Supplementary disclosure of cash flow information:				
Interest paid	36	58	27	46
Income taxes paid	638	543	298	287

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

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

Of the selling of	Common	Additional paid-in	Retained	Accumulated other comprehensive	Treasury	Total ABB stockholders'	Non- controlling	Total stockholders'
(\$ in millions)	stock	capital	earnings	loss	stock	equity	interests	equity
Balance at January 1, 2021	188	83	22,946	(4,002)	(3,530)	15,685	314	15,999
Comprehensive income:								
Net income			1,254			1,254	50	1,304
Foreign currency translation							_	***
adjustments, net of tax of \$2				(166)		(166)	5	(161
Effect of change in fair value of								
available-for-sale securities,				(=)				
net of tax of \$(3)				(8)		(8)		(8
Unrecognized income (expense)								
related to pensions and other								
postretirement plans,								_
net of tax of \$(3)				71		71		7
Change in derivative instruments								
and hedges, net of tax of \$0						_		
Total comprehensive income						1,151	55	1,206
Changes in noncontrolling interests		(37)	(20)			(57)	57	-
Dividends to								
noncontrolling shareholders							(92)	(92)
Dividends to shareholders			(1,730)			(1,730)		(1,730
Cancellation of treasury shares	(10)	(17)	(3,130)		3,157			-
Share-based payment arrangements		37				37		3.
Purchase of treasury stock					(1,924)	(1,924)		(1,924
Delivery of shares		(58)	(136)		960	766		766
Other		2				2		2
Balance at June 30, 2021	178	10	19,185	(4,104)	(1,337)	13,932	334	14,266
Palance at January 1, 2022	178	22	22,477	(4,088)	(3.010)	15,579	378	15,957
Balance at January 1, 2022 Comprehensive income:	170		22,411	(4,088)	(3,010)	15,579	316	15,957
Net income			983			983	48	1,031
Foreign currency translation			363			363	40	1,031
adjustments, net of tax of \$1				(392)		(392)	(22)	(414)
Effect of change in fair value of				(392)		(392)	(22)	(414)
available-for-sale securities,								
				(17)		(17)		(17
net of tax of \$(4)				(17)		(17)		(17
Unrecognized income (expense)								
related to pensions and other								
postretirement plans,				106		106		100
net of tax of \$37				106		106		106
Change in derivative instruments				2				
and hedges, net of tax of \$2				2		2		
Total comprehensive income						682	26	708
Changes in noncontrolling interests		(2)				(2)	(13)	(15)
Dividends to							(7.4)	
noncontrolling shareholders						<u>-</u>	(74)	(74)
Dividends to shareholders			(1,700)			(1,700)		(1,700)
Cancellation of treasury shares	(8)	(4)	(2,864)		2,876	-		-
Share-based payment arrangements		28				28		28
Purchase of treasury stock					(2,693)	(2,693)		(2,693)
Delivery of shares		(38)	(130)		538	370		370
Other		6				6		•
Balance at June 30, 2022	171	12						

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 leading global technology company, connecting software to its electrification, robotics, automation and motion portfolio to drive performance to new levels.

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, 2021.

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 unrecognized tax benefits,
- assumptions used in determining inventory obsolescence and net realizable value,
- estimates and assumptions used in determining the initial fair value of retained noncontrolling interest and certain obligations in connection with divestments,
- · estimates and assumptions used in determining the fair values of assets and liabilities assumed in business combinations,
- 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,
- estimates related to credit losses expected to occur over the remaining life of financial assets such as trade and other receivables, loans and other instruments
- 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.

Note 2

Recent accounting pronouncements

Applicable for current periods

Business Combinations — Accounting for contract assets and contract liabilities from contracts with customers

In January 2022, the Company early adopted a new accounting standard update, which provides guidance on the accounting for revenue contracts acquired in a business combination. The update requires contract assets and liabilities acquired in a business combination to be recognized and measured at the date of acquisition in accordance with the principles for recognizing revenues from contracts with customers. The Company has applied this accounting standard update prospectively starting with acquisitions closing after January 1, 2022.

Disclosures about government assistance

In January 2022, the Company adopted a new accounting standard update, which requires entities to disclose certain types of government assistance. Under the update, the Company is required to annually disclose (i) the type of the assistance received, including any significant terms and conditions, (ii) its related accounting policy, and (iii) the effect such transactions have on its financial statements. The Company has applied this accounting standard update prospectively. This update does not have a significant impact on the Company's consolidated financial statements.

Applicable for future periods

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. This update, along with clarifications outlined in a subsequent update issued in January 2021, can be adopted and applied no later than December 31, 2022, with early adoption permitted. The Company does not expect this update to have a significant impact on its consolidated financial statements.

Note 3

Discontinued operations and assets held for sale

Divestment of the Power Grids business

On July 1, 2020, the Company completed the sale of 80.1 percent of its Power Grids business to Hitachi Ltd (Hitachi). The transaction was executed through the sale of 80.1 percent of the shares of Hitachi Energy Ltd, formerly Hitachi ABB Power Grids Ltd ("Hitachi Energy"). Cash consideration received at the closing date was \$9,241 million net of cash disposed. Further, for accounting purposes, the 19.9 percent ownership interest retained by the Company is deemed to have been both divested and reacquired at its fair value on July 1, 2020 (see Note 4).

At the date of the divestment, the Company recorded liabilities in discontinued operations for estimated future costs and other cash payments of \$487 million for various contractual items relating to the sale of the business including required future cost reimbursements payable to Hitachi Energy, costs to be incurred by the Company for the direct benefit of Hitachi Energy, and an amount due to Hitachi Ltd in connection with the expected purchase price finalization of the closing debt and working capital balances. From the date of the disposal through June 30, 2022, \$438 million of these liabilities had been paid and are reported as reductions in the cash consideration received, of which \$74 million and \$53 million was paid during the six and three months ended June 30, 2022, respectively. In the six and three months ended June 30, 2021, total cash payments made in connection with these liabilities amounted to \$70 million and \$26 million, respectively. At June 30, 2022, the remaining amount recorded was \$64 million.

During the second quarter of 2022, the Company completed the legal title transfer of the remaining entities of Power Grids business to Hitachi Energy, resulting in the release of \$12 million held in escrow and included in Current Restricted Cash at December 31, 2021.

Upon closing of the sale, the Company entered into various transition services agreements (TSAs). Pursuant to these TSAs, the Company and Hitachi Energy provide to each other, on an interim, transitional basis, various services. The services provided by the Company primarily include finance, information technology, human resources and certain other administrative services. Under the current terms, the TSAs will continue for up to 3 years, and can only be extended on an exceptional basis for business-critical services for an additional period which is reasonably necessary to avoid a material adverse impact on the business. In the six and three months ended June 30, 2022, the Company has recognized within its continuing operations, general and administrative expenses incurred to perform the TSA, offset by \$76 million and \$38 million, respectively, in TSA-related income for such services that is reported in Other income (expense). In the six and three months ended June 30, 2021, Other income (expense) included \$88 million and \$41 million, respectively, of TSA-related income for such services.

Discontinued operations

As a result of the sale of the Power Grids business, substantially all assets and liabilities related to Power Grids have been sold. As this divestment represented a strategic shift that would have a major effect on the Company's operations and financial results, the results of this business were presented as discontinued operations and the assets and liabilities were presented as held for sale and in discontinued operations. After the date of sale, certain business contracts in the Power Grids business continue to be executed by subsidiaries of the Company for the benefit/risk of Hitachi Energy. Assets and liabilities relating to, as well as the net financial results of, these contracts will continue to be included in discontinued operations until they have been completed or otherwise transferred to Hitachi Energy.

Amounts recorded in discontinued operations were as follows:

	Six mont	hs ended	Three months ended		
(\$ in millions)	Jun. 30, 2022	Jun. 30, 2021	Jun. 30, 2022	Jun. 30, 2021	
Total revenues	-	-	-	-	
Total cost of sales	-	-	-	_	
Gross profit	-	-	-	_	
Expenses	(11)	(9)	(5)	(5)	
Change to net gain recognized on sale of the Power Grids business	(9)	(27)	(4)	(3)	
Loss from operations	(20)	(36)	(9)	(8)	
Net interest income (expense) and other finance expense	-	-	-	-	
Non-operational pension (cost) credit	-	-	-	_	
Loss from discontinued operations before taxes	(20)	(36)	(9)	(8)	
Income tax	-	-	-	-	
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)	

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 Loss from discontinued operations, net of tax, above.

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

(\$ in millions)	Jun. 30, 2022 ⁽¹⁾	Dec. 31, 2021 ⁽¹⁾
Receivables, net	110	131
Other current assets	12	5
Current assets held for sale and in discontinued operations	122	136
Accounts payable, trade	52	71
Other liabilities	254	310
Current liabilities held for sale and in discontinued operations	306	381
Other non-current liabilities	28	43
Non-current liabilities held for sale and in discontinued operations	28	43

⁽¹⁾ At June 30, 2022, and December 31, 2021, the balances reported as held for sale and in discontinued operations pertain to Power Grids activities and other obligations which will remain with the Company until such time as the obligation is settled or the activities are fully wound down.

Note 4

Acquisitions and equity-accounted companies

Acquisition of controlling interests

Acquisitions of controlling interests were as follows:

	Six months en	ded June 30,	Three months	Three months ended June 30,		
(\$ in millions, except number of acquired businesses)	2022	2021	2022	2021		
Purchase price for acquisitions (net of cash acquired) ⁽¹⁾	138	26	-	26		
Aggregate excess of purchase price						
over fair value of net assets acquired (2)	191	11	-	11		
Number of acquired businesses	1	1	_	1		

⁽¹⁾ Excluding changes in cost- and equity-accounted companies.

In the table above, the "Purchase price for acquisitions" and "Aggregate excess of purchase price over fair value of net assets acquired" amounts for the six months ended June 30, 2022, relate primarily to the acquisition of InCharge Energy, Inc. (In-Charge).

Acquisitions of controlling interests have been accounted for under the acquisition method and have been included in the Company's Consolidated Financial Statements since the date of acquisition.

While the Company uses its best estimates and assumptions as part of the purchase price allocation process to value assets acquired and liabilities assumed at the acquisition date, the purchase price allocation for acquisitions is preliminary for up to 12 months after the acquisition date and is subject to refinement as more detailed analyses are completed and additional information about the fair values of the assets and liabilities becomes available.

⁽²⁾ Recorded as goodwill.

On January 26, 2022, the Company increased its ownership in In-Charge to a 60 percent controlling interest through a stock purchase agreement. The resulting cash outflows for the Company amounted to \$135 million (net of cash acquired of \$4 million). The acquisition expands the market presence of the E-mobility Division, particularly in the North American market. In connection with the acquisition, the Company's pre-existing 13.2 percent ownership of In-Charge was revalued to fair value and a gain of \$32 million was recorded in Other income (expense) in the six months ended June 30, 2022. The Company entered into an agreement with the remaining noncontrolling shareholders allowing either party to put or call the remaining 40 percent of the shares until 2027. The amount for which either party can exercise their option is dependent on a formula based on revenues and thus, the amount is subject to change. As a result of this agreement, the noncontrolling interest is classified as Redeemable noncontrolling interest (i.e. mezzanine equity) in the Consolidated Balance Sheets and was initially recognized at fair value.

There were no significant business acquisitions for the six months ended June 30, 2021.

Investments in equity-accounted companies

In connection with the divestment of its Power Grids business to Hitachi (see Note 3), the Company retained a 19.9 percent interest in the business and obtained an option, exercisable with three-months' notice commencing April 2023, granting it the right to require Hitachi to purchase this investment at fair value, subject to a minimum floor price equivalent to a 10 percent discount compared to the price paid for the initial 80.1 percent. The Company has concluded that based on its continuing involvement with the Power Grids business, including membership in its governing board of directors, it has significant influence over Hitachi Energy. As a result, the investment (including the value of the option) is accounted for using the equity method.

At the date of the divestment of the Power Grids business, the fair value of Hitachi Energy exceeded the book value of the underlying net assets. At June 30, 2022, and December 31, 2021, the reported value of the investment in Hitachi Energy includes \$1,428 million and \$1,474 million, respectively, for the Company's 19.9 percent share of this basis difference. The Company amortizes its share of these differences over the estimated remaining useful lives of the underlying assets that gave rise to this difference, recording the amortization, net of related deferred tax benefit, as a reduction of income from equity-accounted companies. As of June 30, 2022, the Company determined that no impairment of its equity-accounted investments existed.

The carrying value of the Company's investments in equity-accounted companies and respective percentage of ownership is as follows:

	Ownership as of	Carrying	value at
(\$ in millions, except ownership share in %)	June 30, 2022	June 30, 2022	December 31, 2021
Hitachi Energy Ltd	19.9%	1,551	1,609
Others		66	61
Total		1,617	1,670

In the six and three months ended June 30, 2022 and 2021, the Company recorded its share of the earnings of investees accounted for under the equity method of accounting in Other income (expense), net, as follows:

	Six months e	nded June 30,	Three months	Three months ended June 30,		
(\$ in millions)	2022	2021	2022	2021		
Income (loss) from equity-accounted companies, net of taxes	(10)	4	1	8		
Basis difference amortization (net of deferred income tax benefit)	(52)	(61)	(15)	(30)		
Loss from equity-accounted companies	(62)	(57)	(14)	(22)		

Note 5 Cash and equivalents, marketable securities and short-term investments

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

			June 3	0, 2022		
					Cash and	Marketable
		Gross	Gross		equivalents	securities
	unrealized		unrealized		and restricted	and short-term
(\$ in millions)	Cost basis	gains	losses	Fair value	cash	investments
Changes in fair value						
recorded in net income						
Cash	1,752	_	-	1,752	1,752	_
Time deposits	1,074	_	-	1,074	984	90
Equity securities	411	5	-	416	_	416
	3,237	5	_	3,242	2,736	506
Changes in fair value recorded						
in other comprehensive income						
Debt securities available-for-sale:						
U.S. government obligations	270	2	(12)	260	-	260
Other government obligations	122	-	-	122	-	122
Corporate	63	-	(6)	57	-	57
	455	2	(18)	439	-	439
Total	3,692	7	(18)	3,681	2,736	945
Of which:		•		•	•	
Restricted cash, current					23	
Restricted cash, non-current					301	

	December 31, 2021							
		Gross	Gross		Cash and equivalents	Marketable securities		
		unrealized	unrealized		and restricted	and short-term		
(\$ in millions)	Cost basis	gains	losses	Fair value	cash	investments		
Changes in fair value								
recorded in net income								
Cash	2,752			2,752	2,752			
Time deposits	2,037			2,037	1,737	300		
Equity securities	569	18		587		587		
	5,358	18	-	5,376	4,489	887		
Changes in fair value recorded								
in other comprehensive income								
Debt securities available-for-sale:								
U.S. government obligations	203	7	(1)	209		209		
Corporate	74	1	(1)	74		74		
	277	8	(2)	283	-	283		
Total	5,635	26	(2)	5,659	4,489	1,170		
Of which:	•	•	•	•		•		
Restricted cash, current					30			
Restricted cash, non-current					300			

Note 6

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 and cross-currency interest rate swaps are used to manage the interest rate and foreign currency 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	Total notional amounts at					
(\$ in millions)	June 30, 2022	December 31, 2021	June 30, 2021			
Foreign exchange contracts	14,470	11,276	9,309			
Embedded foreign exchange derivatives	850	815	893			
Cross-currency interest rate swaps	833	906	951			
Interest rate contracts	3,049	3,541	3,553			

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				
		June 30, 2022	December 31, 2021	June 30, 2021		
Copper swaps	metric tonnes	42,961	36,017	37,340		
Silver swaps	ounces	2,844,285	2,842,533	2,306,804		
Aluminum swaps	metric tonnes	7,350	7,125	7,325		

Equity derivatives

At June 30, 2022, December 31, 2021, and June 30, 2021, the Company held 9 million, 9 million and 15 million cash-settled call options indexed to ABB Ltd shares (conversion ratio 5:1) with a total fair value of \$12 million, \$29 million and \$34 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. The Company applies cash flow hedge accounting in only limited cases. In these cases, 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. For the six and three months ended June 30, 2022 and 2021, there were no significant amounts recorded for cash flow hedge accounting activities.

Fair value hedges

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To reduce its interest rate exposure arising primarily from its debt issuance activities, the Company uses interest rate swaps and cross-currency 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".

The effect of derivative instruments, designated and qualifying as fair value hedges, on the Consolidated Income Statements was as follows:

		Six months ended June 30,		Three months ended June 30,		
(\$ in millions)		2022	2021	2022	2021	
Gains (losses) recognized in Interes	t and other finance expense:					
Interest rate contracts	Designated as fair value hedges	(55)	(27)	(26)	(13)	
	Hedged item	56	28	27	13	
Cross-currency interest rate swaps	Designated as fair value hedges	(94)	(25)	(49)	(2)	
	Hedged item	90	24	46	2	

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	Gains (losses) recognized in income							
designated as a hedge	-	Six months er	nded June 30,	Three months	ended June 30,			
(\$ in millions)	Location	2022	2021	2022	2021			
Foreign exchange contracts	Total revenues	(119)	(10)	(123)	50			
	Total cost of sales	34	(24)	40	(20)			
	SG&A expenses ⁽¹⁾	23	(1)	15	(8)			
	Non-order related research							
	and development	1	(1)	-	-			
	Interest and other finance expense	(54)	(119)	(76)	(13)			
Embedded foreign exchange	Total revenues	5	(13)	7	1			
contracts	Total cost of sales	(2)	(2)	(3)	(1)			
Commodity contracts	Total cost of sales	(51)	63	(86)	27			
Other	Interest and other finance expense	3	1	2	1			
Total		(160)	(106)	(224)	37			

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

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

	June 30, 2022						
_	Derivative	assets	Derivative liabilities				
	Current in	Non-current in	Current in	Non-current in			
	"Other current	"Other non-current	"Other current	"Other non-current			
(\$ in millions)	assets"	assets"	liabilities"	liabilities"			
Derivatives designated as hedging instruments:							
Foreign exchange contracts	-	-	4	5			
Interest rate contracts	2	-	4	24			
Cross-currency interest rate swaps	-	-	-	268			
Cash-settled call options	12	-	-	-			
Total	14		8	297			
Derivatives not designated as hedging instruments:							
Foreign exchange contracts	82	21	251	12			
Commodity contracts	3	-	56	-			
Interest rate contracts	4	-	5	-			
Embedded foreign exchange derivatives	19	3	14	9			
Total	108	24	326	21			
Total fair value	122	24	334	318			

		December 31	, 2021	
	Derivative	e assets	Derivative	liabilities
	Current in	Non-current in	Current in	Non-current in
	"Other current	"Other non-current	"Other current	"Other non-current
(\$ in millions)	assets"	assets"	liabilities"	liabilities"
Derivatives designated as hedging instruments:				
Foreign exchange contracts	-	-	3	5
Interest rate contracts	9	20	_	_
Cross currency swaps	-	_	_	109
Cash-settled call options	29	-	-	-
Total	38	20	3	114
Derivatives not designated as hedging instruments:				
Foreign exchange contracts	108	14	107	7
Commodity contracts	19	_	5	-
Interest rate contracts	1	_	2	-
Embedded foreign exchange derivatives	10	7	16	10
Total	138	21	130	17
Total fair value	176	41	133	131

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 June 30, 2022, and December 31, 2021, have been presented on a gross basis.

The Company's netting agreements and other similar arrangements allow net settlements under certain conditions. At June 30, 2022, and December 31, 2021, information related to these offsetting arrangements was as follows:

(\$ in millions)			June 30, 2022	<u> </u>	
	Gross amount	Derivative liabilities	Cash	Non-cash	
Type of agreement or	of recognized	eligible for set-off	collateral	collateral	Net asset
similar arrangement	assets	in case of default	received	received	exposure
Derivatives	124	(90)	_	-	34
Total	124	(90)	-	-	34
(\$ in millions)			June 30, 2022		
	Gross amount	Derivative liabilities	Cash	Non-cash	
Type of agreement or	of recognized	eligible for set-off	collateral	collateral	Net liability
similar arrangement	liabilities	in case of default	pledged	pledged	exposure
Derivatives	629	(90)	-	-	539
Total	629	(90)	-	-	539
(\$ in millions)		De	cember 31, 2021		
	Gross amount	Derivative liabilities	Cash	Non-cash	
Type of agreement or	of recognized	eligible for set-off	collateral	collateral	Net asset
similar arrangement	assets	in case of default	received	received	exposure
Derivatives	200	(104)	_	_	96
Total	200	(104)	-	-	96
(\$ in millions)		De	cember 31, 2021		
	Gross amount	Derivative liabilities	Cash	Non-cash	
Type of agreement or	of recognized	eligible for set-off	collateral	collateral	Net liability
similar arrangement	liabilities	in case of default	pledged	pledged	exposure
Derivatives	238	(104)	_	_	134
Total	238	(104)	_	_	134

Note 7

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 exchange-traded equity securities, listed derivatives which are actively traded such as commodity futures, interest rate futures and 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, cross-currency 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:

		June 30, 2	2022	
(\$ in millions)	Level 1	Level 2	Level 3	Total fair value
Assets				
Securities in "Marketable securities and short-term investments":				
Equity securities		416		416
Debt securities—U.S. government obligations	260			260
Debt securities—Other government obligations		122		122
Debt securities—Corporate		57		57
Derivative assets—current in "Other current assets"		122		122
Derivative assets—non-current in "Other non-current assets"		24		24
Total	260	741	-	1,001
Liabilities				
Derivative liabilities—current in "Other current liabilities"		334		334
Derivative liabilities—non-current in "Other non-current liabilities"		318		318
Total	_	652	-	652

		December 3	1, 2021
(\$ in millions)	Level 1	Level 2	Level 3 Total fair value
Assets			
Securities in "Marketable securities and short-term investments":			
Equity securities		587	587
Debt securities—U.S. government obligations	209		209
Debt securities—Corporate		74	74
Derivative assets—current in "Other current assets"		176	176
Derivative assets—non-current in "Other non-current assets"		41	41
Total	209	878	- 1,087
Liabilities			
Derivative liabilities—current in "Other current liabilities"		133	133
Derivative liabilities—non-current in "Other non-current liabilities"		131	131
Total	-	264	- 264

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" and "Other non-current assets": 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 non-performance 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 elects to record private equity investments without readily determinable fair values at cost, less impairment, adjusted by observable price changes. The Company reassesses at each reporting period whether these investments continue to qualify for this treatment. During the six months ended June 30, 2022 and 2021, the Company recognized, in Other income (expense), net fair value gains of \$30 million and \$109 million, respectively, related to certain of its private equity investments based on observable market price changes for an identical or similar investment of the same issuer of which net gains of \$1 million and \$99 million were recognized in the three months ended June 30, 2022 and 2021, respectively. The fair values were determined using level 2 inputs. The carrying values of investments, carried at fair value on a non-recurring basis, at June 30, 2022, and December 31, 2021, totaled \$40 million and \$146 million, respectively.

Apart from the transactions above, there were no additional significant non-recurring fair value measurements during the six months ended June 30, 2022 and 2021.

Disclosure about financial instruments carried on a cost basis

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

		Ju	ne 30, 2022		
(\$ in millions)	Carrying value	Level 1	Level 2	Level 3	Total fair value
Assets					
Cash and equivalents (excluding securities with original					
maturities up to 3 months):					
Cash	1,428	1,428			1,428
Time deposits	984		984		984
Restricted cash	23	23			23
Marketable securities and short-term investments					
(excluding securities):					
Time deposits	90		90		90
Restricted cash, non-current	301	301			301
Liabilities					
Short-term debt and current maturities of long-term debt					
(excluding finance lease obligations)	2,798	769	2,029		2,798
Long-term debt (excluding finance lease obligations)	4,913	4,797	39		4,836

	December 31, 2021						
(\$ in millions)	Carrying value	Level 1	Level 2	Level 3	Total fair value		
Assets							
Cash and equivalents (excluding securities with original							
maturities up to 3 months):							
Cash	2,422	2,422			2,422		
Time deposits	1,737		1,737		1,737		
Restricted cash	30	30			30		
Marketable securities and short-term investments							
(excluding securities):							
Time deposits	300		300		300		
Restricted cash, non-current	300	300			300		
Liabilities							
Short-term debt and current maturities of long-term debt							
(excluding finance lease obligations)	1,357	1,288	69		1,357		
Long-term debt (excluding finance lease obligations)	4,043	4,234	58		4,292		

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), Restricted cash, current and non-current, and Marketable securities and short-term investments (excluding securities): The carrying amounts approximate the fair values as the items are short-term in nature or, for cash held in banks, are equal to the deposit amount.
- 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 8

Contract assets and liabilities

The following table provides information about Contract assets and Contract liabilities:

(\$ in millions)	June 30, 2022	December 31, 2021	June 30, 2021
Contract assets	965	990	1,087
Contract liabilities	2,141	1,894	1,846

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:

	:	Six months en	Contract Contract Con liabilities assets liabilities (763)		
	20	22	20	21	
	Contract	Contract	Contract	Contract	
(\$ in millions)	assets	liabilities	assets	liabilities	
Revenue recognized, which was included in the Contract liabilities balance at Jan 1, 2022/2021		(763)		(818)	
Additions to Contract liabilities - excluding amounts recognized as revenue during the period		1,102		785	
Receivables recognized that were included in the Contract asset balance at Jan 1, 2022/2021	(423)		(411)		

At June 30, 2022, the Company had unsatisfied performance obligations totaling \$19,477 million and, of this amount, the Company expects to fulfill approximately 56 percent of the obligations in 2022, approximately 33 percent of the obligations in 2023 and the balance thereafter.

Note 9

Debt

The Company's total debt at June 30, 2022, and December 31, 2021, amounted to \$7,916 million and \$5,561 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)	June 30, 2022	December 31, 2021
Short-term debt	2,058	78
Current maturities of long-term debt	772	1,306
Total	2,830	1,384

Short-term debt primarily represented issued commercial paper and short-term bank borrowings from various banks. At June 30, 2022, \$1,755 million was outstanding under the \$2 billion Euro-commercial paper program and \$210 million was outstanding under the \$2 billion commercial paper program in the United States. At December 31, 2021, no amount was outstanding under either of these programs.

On May 9, 2022, the Company repaid on maturity its USD 1,250 million 2.875% Notes.

Long-term debt

The Company's long-term debt at June 30, 2022, and December 31, 2021, amounted to \$5,086 million and \$4,177 million, respectively.

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

		June 30, 2022				December 31, 2021			
(in millions) Bonds:	Nominal ou	Nominal outstanding		Carrying value ⁽¹⁾		Nominal outstanding		Carrying value ⁽¹⁾	
								<u>.</u>	
2.875% USD Notes, due 2022					USD	1,250	\$	1,258	
0.625% EUR Instruments, due 2023	EUR	700	\$	726	EUR	700	\$	800	
0% CHF Bonds, due 2023	CHF	275	\$	286					
0.625% EUR Instruments, due 2024	EUR	700	\$	717					
0% EUR Instruments, due 2024	EUR	500	\$	524					
0.75% EUR Instruments, due 2024	EUR	750	\$	765	EUR	750	\$	860	
0.3% CHF Bonds, due 2024	CHF	280	\$	292	CHF	280	\$	306	
0.75% CHF Bonds, due 2027	CHF	425	\$	443					
3.8% USD Notes, due 2028 ⁽²⁾	USD	383	\$	381	USD	383	\$	381	
1.0% CHF Bonds, due 2029	CHF	170	\$	177	CHF	170	\$	186	
0% EUR Notes, due 2030	EUR	800	\$	700	EUR	800	\$	862	
4.375% USD Notes, due 2042 ⁽²⁾	USD	609	\$	590	USD	609	\$	589	
Total			\$	5,601			\$	5,242	

- (1) USD carrying values include unamortized debt issuance costs, bond discounts or premiums, as well as adjustments for fair value hedge accounting, where appropriate.
- (2) Prior to completing a cash tender offer in November 2020, the original principal amount outstanding, on each of the 3.8% USD Notes, due 2028, and the 4.375% USD Notes, due 2042, was USD 750 million.

In March 2022, the Company issued the following CHF bonds: (i) CHF 275 million of zero interest bonds, due 2023, and (ii) CHF 425 million of 0.75 percent bonds, due 2027 with interest payable annually in arrears. The aggregate net proceeds of these CHF bond issues, after discount and fees, amounted to CHF 699 million (equivalent to approximately \$751 million on date of issuance).

Also in March 2022, the Company issued the following EUR notes, both due in 2024, (i) EUR 700 million, paying interest annually in arrears at a fixed rate of 0.625 percent per annum, and (ii) EUR 500 million floating rate notes, paying interest quarterly in arrears at a variable rate of 70 basis points above the 3-month EURIBOR. In relation to these EUR Notes, the Company recorded net proceeds (after the respective discount and premium, as well as fees) of EUR 1,203 million (equivalent to \$1,335 million on the date of issuance).

In line with the Company's policy of reducing its currency and interest rate exposures, interest rate swaps have been used to modify the characteristics of the CHF 425 million Bonds, due 2027, and the EUR 700 million Notes, due 2024. After considering the impact of these interest rate swaps, the CHF 425 million Bonds and EUR 700 million Notes, effectively become floating rate obligations.

Note 10

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. In May 2020, the SFO closed its investigation, which it originally announced in February 2017, as the case did not meet the relevant test for prosecution. The Company continues to cooperate with the U.S. authorities as requested. At this time, it is not possible for the Company to make an informed judgment about the outcome of this matter.

Based on findings during an internal investigation, the Company self-reported to the SEC and the DoJ, in the United States, to the Special Investigating Unit (SIU) and the National Prosecuting Authority (NPA) in South Africa as well as to various authorities in other countries 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. The Company paid \$104 million to Eskom in December 2020 as part of a full and final settlement with Eskom and the Special Investigating Unit relating to improper payments and other compliance issues associated with the Controls and Instrumentation Contract, and its Variation Orders for Units 1 and 2 at Kusile. The Company continues to cooperate fully with the authorities in their review of the Kusile project and is in discussions with them regarding a coordinated resolution. Although the Company believes that there could be an unfavorable outcome in one or more of these ongoing reviews, at this time it is not possible for the Company to make an informed judgment about the possible financial impact.

Genera

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 June 30, 2022, and December 31, 2021, the Company had aggregate liabilities of \$82 million and \$104 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 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)	June 30, 2022	December 31, 2021
Performance guarantees	4,036	4,540
Financial guarantees	55	52
Indemnification guarantees ⁽¹⁾	130	136
Total ⁽²⁾	4,221	4,728

- (1) Certain indemnifications provided to Hitachi in connection with the divestment of Power Grids are without limit.
- (2) 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 June 30, 2022, and December 31, 2021, amounted to \$142 million and \$156 million, respectively, the majority of which is included in discontinued operations.

The Company is party to various guarantees providing financial or performance assurances to certain third parties. These guarantees, which have various maturities up to 2035, 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 ten years.

In conjunction with the divestment of the high-voltage cable and cables accessories businesses in 2017, the Company has entered into various performance guarantees with other parties with respect to certain liabilities of the divested business. At June 30, 2022, and December 31, 2021, the maximum potential payable under these guarantees amounts to \$828 million and \$911 million, respectively, and these guarantees have various original maturities ranging from five to ten years.

The Company retained obligations for financial, performance and indemnification guarantees related to the Power Grids business sold on July 1, 2020 (see Note 3 for details). The performance and financial guarantees have been indemnified by Hitachi, at the same proportion of its ownership in Hitachi Energy Ltd (80.1 percent). These guarantees, which have various maturities up to 2035, primarily consist of bank guarantees, standby letters of credit, business performance guarantees and other trade-related guarantees, the majority of which have original maturity dates ranging from one to ten years. The maximum amount payable under the guarantees at June 30, 2022, and December 31, 2021, is approximately \$2.8 billion and \$3.2 billion, respectively, and the carrying amounts of liabilities (recorded in discontinued operations) at June 30, 2022, and December 31, 2021, amounted to \$130 million and \$136 million, respectively.

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 both June 30, 2022, and December 31, 2021, the total outstanding performance bonds aggregated to \$3.1 billion, of each of these amounts, \$0.1 billion relates to discontinued operations. There have been no significant amounts reimbursed to financial institutions under these types of arrangements in the six and three months ended June 30, 2022 and 2021.

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)	2022	2021
Balance at January 1,	1,005	1,035
Net change in warranties due to acquisitions, divestments and liabilities held for sale	-	1
Claims paid in cash or in kind	(82)	(127)
Net increase in provision for changes in estimates, warranties issued and warranties expired	103	122
Exchange rate differences	(54)	(19)
Balance at June 30,	972	1,012

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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.

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

(\$ in millions)		Defined pens	Other postre	tirement		
	Switze	erland	Interna	ational	benefits	
Six months ended June 30,	2022	2021	2022	2021	2022	2021
Operational pension cost:				_		
Service cost	27	30	17	22	-	-
Operational pension cost	27	30	17	22	-	-
Non-operational pension cost (credit):						
Interest cost	1	(2)	43	37	1	1
Expected return on plan assets	(58)	(58)	(77)	(91)	-	-
Amortization of prior service cost (credit)	(4)	(5)	(1)	(1)	(1)	(1)
Amortization of net actuarial loss	-	_	30	35	(2)	(1)
Curtailments, settlements and special termination benefits	-	_	-	(2)	-	-
Non-operational pension cost (credit)	(61)	(65)	(5)	(22)	(2)	(1)
Net periodic benefit cost (credit)	(34)	(35)	12	_	(2)	(1)

(\$ in millions) Three months ended June 30,		Defined pens	Other postretirement			
	Switze	Switzerland		ational	benefits	
	2022	2021	2022	2021	2022	2021
Operational pension cost:						
Service cost	13	15	8	12	-	_
Operational pension cost	13	15	8	12	_	_
Non-operational pension cost (credit):						
Interest cost	_	(1)	21	19	1	1
Expected return on plan assets	(28)	(29)	(36)	(44)	-	_
Amortization of prior service cost (credit)	(2)	(3)	(1)	(1)	-	(1)
Amortization of net actuarial loss	_	_	15	18	(2)	(1)
Curtailments, settlements and special termination benefits	_	_	_	4	-	_
Non-operational pension cost (credit)	(30)	(33)	(1)	(4)	(1)	(1)
Net periodic benefit cost (credit)	(17)	(18)	7	8	(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.

Employer contributions were as follows:

(\$ in millions)	Defined pension benefits				Other postretirement	
	Switzerland Internation		ational	benefits		
Six months ended June 30,	2022	2021	2022	2021	2022	2021
Total contributions to defined benefit pension and						
other postretirement benefit plans	31	31	19	13	4	3
Of which, discretionary contributions to defined benefit						
pension plans	-	_	-	(9)	-	-

(\$ in millions)		Defined pension benefits				Other postretirement	
	Switze	Switzerland		International		benefits	
Three months ended June 30,	2022	2021	2022	2021	2022	2021	
Total contributions to defined benefit pension and							
other postretirement benefit plans	15	16	9	16	1	2	
Of which, discretionary contributions to defined benefit							
pension plans	-	-	-	-	-	-	

The Company expects to make contributions totaling approximately \$77 million and \$6 million to its defined pension plans and other postretirement benefit plans, respectively, for the full year 2022.

Note 12

Stockholder's equity

At the Annual General Meeting of Shareholders (AGM) on March 24, 2022, shareholders approved the proposal of the Board of Directors to distribute 0.82 Swiss francs per share to shareholders. The declared dividend amounted to \$1,700 million, with the Company disbursing a portion in March and the remaining amounts in April.

In March 2022, the Company completed the share buyback program that was launched in April 2021. This program was executed on a second trading line on the SIX Swiss Exchange. Through this program, the Company purchased a total of 90 million shares for approximately \$3.1 billion, of which 31 million shares were purchased in the first quarter of 2022 (resulting in an increase in Treasury stock of \$1,089 million). At the 2022 AGM, shareholders approved the cancellation of 88 million shares which had been purchased under the share buyback programs launched in July 2020 and April 2021. The cancellation was completed in the second quarter of 2022, resulting in a decrease in Treasury stock of \$2,876 million and a corresponding total decrease in Capital stock, Additional paid-in capital and Retained Earnings.

Also in March 2022, the Company announced a new share buyback program of up to \$3 billion. This program, which was launched in April 2022, is being executed on a second trading line on the SIX Swiss Exchange and is planned to run until the Company's 2023 AGM. Through this program, the Company purchased, in the second quarter of 2022, approximately 34 million shares, resulting in an increase in Treasury stock of \$1,016 million. At the 2023 AGM, the Company intends to request shareholder approval to cancel the shares purchased through this new program as well as those shares purchased under the program launched in April 2021 that were not proposed for cancellation at the 2022 AGM.

In addition to the share buyback programs, the Company purchased 17 million of its own shares on the open market in the first half of 2022, mainly for use in connection with its employee share plans, resulting in an increase in Treasury stock of \$588 million.

During the first six months of 2022, the Company delivered, out of treasury stock, 16 million shares in connection with its Management Incentive Plan.

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

	Six months e	nded June 30,	Three months ended June 30,	
(\$ in millions, except per share data in \$)	2022	2021	2022	2021
Amounts attributable to ABB shareholders:				
Income from continuing operations, net of tax	1,003	1,290	388	760
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)
Net income	983	1,254	379	752
Weighted-average number of shares outstanding (in millions)	1,922	2,015	1,909	2,016
Basic earnings per share attributable to ABB shareholders:				
Income from continuing operations, net of tax	0.52	0.64	0.20	0.38
Loss from discontinued operations, net of tax	(0.01)	(0.02)	0.00	0.00
Net income	0.51	0.62	0.20	0.37

Diluted earnings per share

_	Six months ended	June 30,	Three months ended June 30,		
(\$ in millions, except per share data in \$)	2022	2021	2022	2021	
Amounts attributable to ABB shareholders:					
Income from continuing operations, net of tax	1,003	1,290	388	760	
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)	
Net income	983	1,254	379	752	
Weighted-average number of shares outstanding (in millions)	1,922	2,015	1,909	2,016	
Effect of dilutive securities:					
Call options and shares	13	18	9	15	
Adjusted weighted-average number of shares outstanding (in millions)	1,935	2,033	1,918	2,031	
Diluted earnings per share attributable to ABB shareholders:					
Income from continuing operations, net of tax	0.52	0.63	0.20	0.37	
Loss from discontinued operations, net of tax	(0.01)	(0.02)	0.00	0.00	
Net income	0.51	0.62	0.20	0.37	

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:

		Unrealized gains	Pension and		
	Foreign currency	(losses) on	other	Derivative	
	translation	available-for-sale	postretirement	instruments	
(\$ in millions)	adjustments	securities	plan adjustments	and hedges	Total OCI
Balance at January 1, 2021	(2,460)	17	(1,556)	(3)	(4,002)
Other comprehensive (loss) income:					
Other comprehensive (loss) income					
before reclassifications	(161)	(7)	34	14	(120)
Amounts reclassified from OCI	-	(1)	37	(14)	22
Total other comprehensive (loss) income	(161)	(8)	71	-	(98)
Less:					
Amounts attributable to					
noncontrolling interests	5	-	_	_	5
Balance at June 30, 2021 ⁽¹⁾	(2,625)	9	(1,485)	(3)	(4,104)

		Unrealized gains	Pension and		
	Foreign currency	(losses) on	other	Derivative	
	translation	available-for-sale	postretirement	instruments	
(\$ in millions)	adjustments	securities	plan adjustments	and hedges	Total OCI
Balance at January 1, 2022	(2,993)	2	(1,089)	(8)	(4,088)
Other comprehensive (loss) income:					
Other comprehensive (loss) income					
before reclassifications	(419)	(17)	91	(12)	(357)
Amounts reclassified from OCI	5	-	15	14	34
Total other comprehensive (loss) income	(414)	(17)	106	2	(323)
Less:					
Amounts attributable to					
noncontrolling interests	(22)	-	-	-	(22)
Balance at June 30, 2022	(3,385)	(15)	(983)	(6)	(4,389)

 $^{(1) \}quad \hbox{Due to rounding, numbers presented may not add to the totals provided.}$

 $The following table \ reflects \ amounts \ reclassified \ out \ of \ OCI \ in \ respect \ of \ Pension \ and \ other \ postretirement \ plan \ adjustments:$

		Six mont	hs ended	Three months ended		
(\$ in millions)	Location of (gains) losses	June	e 30,	June 30,		
Details about OCI components	reclassified from OCI	2022	2021	2022	2021	
Foreign currency translation adjustments:						
Net loss on complete or substantially complete						
liquidations of foreign subsidiaries	Other income (expense), net	5	_	-	_	
Pension and other postretirement plan adjustments:						
Amortization of prior service cost (credit)	Non-operational pension (cost) credit ⁽¹⁾	(6)	(7)	(3)	(5)	
Amortization of net actuarial loss	Non-operational pension (cost) credit ⁽¹⁾	28	34	13	23	
Net gain (loss) from settlements and curtailments	Non-operational pension (cost) credit ⁽¹⁾	_	(2)	-	(2)	
Total before tax		22	25	10	16	
Tax	Income tax expense	(7)	12	(3)	(4)	
Amounts reclassified from OCI		15	37	7	12	

The amounts in respect of Unrealized gains (losses) on available-for-sale securities and Derivative instruments and hedges were not significant for the six and three months ended June 30, 2022 and 2021.

Note 15

Restructuring and related expenses

Other restructuring-related activities

In the six and three months ended June 30, 2022 and 2021, the Company executed various other restructuring-related activities and incurred the following expenses:

	Six months ended June 30, Three months ender			ended June 30,
(\$ in millions)	2022	2021	2022	2021
Employee severance costs	43	33	35	13
Estimated contract settlement, loss order and other costs	202	12	195	3
Inventory and long-lived asset impairments	5	2	1	2
Total	250	47	231	18

Expenses associated with these activities are recorded in the following line items in the Consolidated Income Statements:

	Six months e	nded June 30,	Three months	Three months ended June 30,		
(\$ in millions)	2022	2021	2022	2021		
Total cost of sales	8	24	4	10		
Selling, general and administrative expenses	28	5	24	3		
Non-order related research and development expenses	2	-	2	-		
Other income (expense), net	212	18	201	5		
Total	250	47	231	18		

During the second quarter of 2022, the Company completed a plan to fully exit its full train retrofit business by transferring the remaining contracts to a third party. The Company recorded \$195 million of restructuring expenses in connection with this business exit primarily for contract settlement costs. Prior to exiting this business, the business was reported as part of the Company's non-core business activities within Corporate and Other.

At June 30, 2022, \$332 million was recorded for other restructuring-related liabilities primarily in Other provisions and Other current liabilities, while at December 31, 2021, \$212 million was recorded primarily 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 the following segments, based on products and services: Electrification, Motion, Process Automation, 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 safe, smart and sustainable electrical
 flow from the substation to the socket. The portfolio of increasingly digital and connected solutions includes electric vehicle charging
 infrastructure, renewable 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. The products and services are delivered through seven operating Divisions: Distribution Solutions, Smart Power,
 Smart Buildings, E-Mobility, Installation Products, Power Conversion and Electrification Service.
- Motion: designs, manufactures, and sells drives, motors, generators and traction converters that are driving the low-carbon future for industries, cities, infrastructure and transportation. These products, digital technology and related services enable industrial customers to increase energy efficiency, improve safety and reliability, and achieve precise control of their processes. Building on over 130 years of cumulative experience in electric powertrains, the Business Area combines domain expertise and technology to deliver the optimum solution for a wide range of applications in all industrial segments. In addition, the Business Area, along with its partners, has a leading global service presence. These products and services are delivered through seven operating Divisions: Large Motors and Generators, IEC LV Motors, NEMA Motors, Drive Products, System Drives, Service and Traction, as well as, prior to its sale in November 2021, the Mechanical Power Transmission Division.

- Process Automation: develops and sells a broad range of industry-specific, integrated automation, electrification and digital systems and solutions, as well as digital solutions, lifecycle services, advanced industrial analytics and artificial intelligence applications and suites for the process, marine and hybrid industries. Products and solutions include control technologies, advanced process control software and manufacturing execution systems, sensing, measurement and analytical instrumentation, marine propulsion systems and turbochargers. In addition, the Business Area offers a comprehensive range of services ranging from repair to advanced services such as remote monitoring, preventive maintenance, asset performance management, emission monitoring and cybersecurity services. The products, systems and services are delivered through five operating Divisions: Energy Industries, Process Industries, Marine & Ports, Turbocharging, and Measurement & Analytics.
- Robotics & Discrete Automation: delivers its products, solutions and services through two operating Divisions: Robotics and Machine Automation. Robotics includes industrial robots, software, robotic solutions, field services, spare parts, and digital services. Machine Automation specializes in solutions based on its programmable logic controllers (PLC), industrial PCs (IPC), servo motion, transport systems and machine vision. Both Divisions offer engineering and simulation software as well as a comprehensive range of digital solutions.

Corporate and Other: includes headquarter costs, the Company's corporate real estate activities, Corporate Treasury Operations, historical operating activities of certain divested businesses 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 acquisition (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,
- other income/expense relating to the Power Grids joint venture,
- 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 and certain other fair value changes, 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 six and three months ended June 30, 2022 and 2021, as well as total assets at June 30, 2022, and December 31, 2021.

			Six months ended	June 30, 2022		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions)	Electrification	Motion	Automation	Automation	and Other	Total
Geographical markets						
Europe	2,228	953	1,131	712	2	5,026
The Americas	2,531	1,029	767	238	1	4,566
of which: United States	1,849	853	460	166	_	3,328
Asia, Middle East and Africa	1,993	995	1,119	509	8	4,624
of which: China	1,007	565	309	382	1	2,263
	6,752	2,977	3,017	1,459	11	14,216
Product type						
Products	5,920	2,552	681	858	6	10,017
Systems	407	_	961	372	5	1,745
Services and other	425	425	1,375	229	-	2,454
	6,752	2,977	3,017	1,459	11	14,216
Third-party revenues	6,752	2,977	3,017	1,459	11	14,216
Intersegment revenues	106	221	18	3	(348)	_
Total revenues ⁽²⁾	6,858	3,198	3,035	1,462	(337)	14,216

			Six months ended	June 30, 2021		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions)	Electrification	Motion	Automation	Automation	and Other	Total
Geographical markets						
Europe	2,266	1,020	1,142	814	6	5,248
The Americas	2,221	1,223	658	224	1	4,327
of which: United States	1,655	1,029	363	161	_	3,208
Asia, Middle East and Africa	1,950	1,047	1,125	642	11	4,775
of which: China	1,053	577	376	483	_	2,489
	6,437	3,290	2,925	1,680	18	14,350
Product type						
Products	5,557	2,845	749	1,058	10	10,219
Systems	450	_	811	386	8	1,655
Services and other	430	445	1,365	236	-	2,476
	6,437	3,290	2,925	1,680	18	14,350
Third-party revenues	6,437	3,290	2,925	1,680	18	14,350
Intersegment revenues ⁽¹⁾	109	227	22	5	(363)	_
Total revenues ⁽²⁾	6,546	3,517	2,947	1,685	(345)	14,350

		7	Three months ende	d June 30, 2022		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions)	Electrification	Motion	Automation	Automation	and Other	Total
Geographical markets						
Europe	1,116	487	546	358	1	2,508
The Americas	1,330	537	399	130	1	2,397
of which: United States	967	446	239	94	_	1,746
Asia, Middle East and Africa	1,029	496	573	242	6	2,346
of which: China	542	278	159	185	_	1,163
	3,475	1,520	1,518	730	8	7,251
Product type						
Products	3,093	1,304	335	418	2	5,152
Systems	161	-	494	200	6	861
Services and other	221	216	689	112	-	1,238
	3,475	1,520	1,518	730	8	7,251
Third-party revenues	3,475	1,520	1,518	730	8	7,251
Intersegment revenues	56	106	11	2	(175)	_
Total revenues	3,531	1,626	1,529	732	(167)	7,251

		1	Three months ende	d June 30, 2021		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions)	Electrification	Motion	Automation	Automation	and Other	Total
Geographical markets						
Europe	1,166	551	579	396	5	2,697
The Americas	1,163	635	368	118	-	2,284
of which: United States	855	535	200	86	_	1,676
Asia, Middle East and Africa	1,021	544	583	316	4	2,468
of which: China	565	313	201	234	_	1,313
	3,350	1,730	1,530	830	9	7,449
Product type						
Products	2,937	1,496	428	532	3	5,396
Systems	181	-	402	182	6	771
Services and other	232	234	700	116	-	1,282
	3,350	1,730	1,530	830	9	7,449
Third-party revenues	3,350	1,730	1,530	830	9	7,449
Intersegment revenues	56	120	10	2	(188)	-
Total revenues	3,406	1,850	1,540	832	(179)	7,449

⁽¹⁾ Due to rounding, numbers presented may not add to the totals provided.

	Six months en	ded	Three months ended		
	June 30,		June 30,		
(\$ in millions)	2022	2021	2022 599 266 224 60 12 (25) 1,136 (59) (264) 3 2 (4) (50) (2) (118) (33) 41 (5) (40) - (20) 587 20 (40) 32	2021	
Operational EBITA:					
Electrification	1,109	1,103	599	592	
Motion	540	614	266	325	
Process Automation	420	347	224	192	
Robotics & Discrete Automation	109	201	60	96	
Corporate and Other					
– Non-core and divested businesses	18	(29)	12	(7)	
– Corporate costs and Other Intersegment elimination	(63)	(164)	(25)	(85)	
Total	2,133	2,072	1,136	1,113	
Acquisition-related amortization	(119)	(129)	(59)	(64)	
Restructuring, related and implementation costs ⁽¹⁾	(280)	(53)	(264)	(18)	
Changes in obligations related to divested businesses	17	(6)	3	(4)	
Changes in pre-acquisition estimates	1	(8)	2	(2)	
Gains and losses from sale of businesses	(4)	9	(4)	12	
Acquisition- and divestment-related expenses and integration costs	(109)	(30)	(50)	(20)	
Other income/expense relating to the Power Grids joint venture	(37)	(19)	(2)	(2)	
Foreign exchange/commodity timing differences in income from operations:					
Unrealized gains and losses on derivatives (foreign exchange,					
commodities, embedded derivatives)	(100)	(56)	(118)	(8)	
Realized gains and losses on derivatives where the underlying hedged					
transaction has not yet been realized	(35)	9	(33)	7	
Unrealized foreign exchange movements on receivables/payables (and					
related assets/liabilities)	40	28	41	(6)	
Certain other non-operational items:					
Regulatory, compliance and legal costs	(4)	(2)	(5)	-	
Business transformation costs ⁽²⁾	(66)	(39)	(40)	(19)	
Certain other fair value changes, including asset impairments	34	114	_	96	
Other non-operational items	(27)	1	(20)	9	
Income from operations	1,444	1,891	587	1,094	
Interest and dividend income	33	26	20	15	
Interest and other finance expense	(62)	(91)	(40)	(36)	
Non-operational pension (cost) credit	68	88	32	38	
Income from continuing operations before taxes	1,483	1,914	599	1,111	

⁽¹⁾ Includes impairment of certain assets.

⁽²⁾ Amount includes ABB Way process transformation costs of \$64 million and \$33 million for six months ended June 30, 2022 and 2021, respectively, and \$39 million and \$18 million for the three months ended June 30, 2022 and 2021, respectively.

	Total ass	ets ⁽¹⁾
(\$ in millions)	June 30, 2022	December 31, 2021
Electrification	13,684	12,831
Motion	6,247	5,936
Process Automation	4,929	5,009
Robotics & Discrete Automation	4,732	4,860
Corporate and Other ⁽²⁾	9,306	11,624
Consolidated	38,898	40,260

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

⁽²⁾ At June 30, 2022, and December 31, 2021, respectively, Corporate and Other includes \$122 million and \$136 million of assets in the Power Grids business which is reported as discontinued operations (see Note 3). In addition, at June 30, 2022, and December 31, 2021, Corporate and Other includes \$1,551 million and \$1,609 million, respectively, related to the equity investment in Hitachi Energy Ltd (see Note 4).





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 six and three months ended June 30, 2022.

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 Area

				Q2 2022 compa	red to Q2 2021			
		Order grov	wth rate			Revenue growth rate		
	US\$	Foreign			US\$	Foreign		
	(as	exchange	Portfolio		(as	exchange	Portfolio	
Business Area	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable
Electrification	9%	7%	0%	16%	4%	6%	0%	10%
Motion	7%	7%	12%	26%	-12%	6%	9%	3%
Process Automation	17%	8%	0%	25%	-1%	8%	0%	7%
Robotics & Discrete Automation	15%	9%	-1%	23%	-12%	7%	0%	-5%
ABB Group	10%	7%	3%	20%	-3%	7%	2%	6%

				H1 2022 compa	ed to H1 2021				
		Order grov	wth rate			Revenue growth rate			
	US\$	Foreign			US\$	Foreign			
	(as	exchange	Portfolio		(as	exchange	Portfolio		
Business Area	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable	
Electrification	17%	5%	0%	22%	5%	5%	0%	10%	
Motion	11%	6%	12%	29%	-9%	5%	10%	6%	
Process Automation	9%	6%	0%	15%	3%	6%	0%	9%	
Robotics & Discrete Automation	34%	8%	-2%	40%	-13%	5%	-1%	-9%	
ABB Group	15%	6%	3%	24%	-1%	6%	2%	7%	

				Q2 2022 compa	red to Q2 2021			
		Order grov	wth rate			Revenue gro	owth rate	
	US\$	Foreign			US\$	Foreign		
	(as	exchange	Portfolio		(as	exchange	Portfolio	
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable
Europe	0%	15%	0%	15%	-7%	14%	0%	7%
The Americas	23%	1%	9%	33%	5%	1%	8%	14%
of which: United States	21%	0%	11%	32%	4%	0%	10%	14%
Asia, Middle East and Africa	9%	6%	0%	15%	-5%	5%	0%	0%
of which: China	7%	3%	0%	10%	-11%	2%	0%	-9%
ABB Group	10%	7%	3%	20%	-3%	7%	2%	6%

Regional comparable growth rate reconciliation by Business Area - Quarter

	Q2 2022 compared to Q2 2021								
	Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign			
	(as	exchange	Portfolio		(as	exchange	Portfolio		
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable	
Europe	-4%	14%	0%	10%	-4%	14%	0%	10%	
The Americas	29%	1%	0%	30%	14%	1%	0%	15%	
of which: United States	31%	0%	0%	31%	13%	0%	0%	13%	
Asia, Middle East and Africa	1%	6%	0%	7%	1%	5%	0%	6%	
of which: China	-7%	2%	0%	-5%	-4%	3%	0%	-1%	
Electrification	9%	7%	0%	16%	4%	6%	0%	10%	

	Q2 2022 compared to Q2 2021								
	Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign			
	(as	exchange	Portfolio		(as	exchange	Portfolio		
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable	
Europe	1%	16%	0%	17%	-12%	14%	0%	2%	
The Americas	3%	2%	34%	39%	-15%	1%	28%	14%	
of which: United States	7%	1%	42%	50%	-16%	0%	31%	15%	
Asia, Middle East and Africa	17%	5%	2%	24%	-10%	4%	1%	-5%	
of which: China	5%	2%	2%	9%	-13%	2%	1%	-10%	
Motion	7%	7%	12%	26%	-12%	6%	9%	3%	

	Q2 2022 compared to Q2 2021								
	Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign			
Region	(as reported)	exchange impact	Portfolio changes	Comparable	(as reported)	exchange impact	Portfolio changes	Comparable	
									Europe
The Americas	53%	2%	0%	55%	9%	3%	0%	12%	
of which: United States	26%	1%	0%	27%	20%	1%	0%	21%	
Asia, Middle East and Africa	4%	7%	0%	11%	-2%	7%	0%	5%	
of which: China	21%	3%	0%	24%	-21%	3%	0%	-18%	
Process Automation	17%	8%	0%	25%	-1%	8%	0%	7%	

	Q2 2022 compared to Q2 2021								
	Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign			
	(as	exchange	Portfolio		(as	exchange	Portfolio		
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable	
Europe	9%	15%	-2%	22%	-10%	13%	-1%	2%	
The Americas	-3%	0%	0%	-3%	9%	1%	0%	10%	
of which: United States	-3%	0%	0%	-3%	10%	0%	0%	10%	
Asia, Middle East and Africa	30%	6%	0%	36%	-23%	4%	0%	-19%	
of which: China	40%	3%	0%	43%	-21%	2%	0%	-19%	
Robotics & Discrete Automation	15%	9%	-1%	23%	-12%	7%	0%	-5%	

		H1 2022 compared to H1 2021									
		Order grov	wth rate								
	US\$	Foreign			US\$	Foreign					
	(as	exchange	Portfolio		(as	exchange	Portfolio				
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable			
Europe	7%	12%	0%	19%	-4%	11%	0%	7%			
The Americas	26%	0%	10%	36%	6%	1%	8%	15%			
of which: United States	26%	1%	12%	39%	4%	0%	10%	14%			
Asia, Middle East and Africa	16%	3%	0%	19%	-3%	3%	0%	0%			
of which: China	17%	1%	0%	18%	-9%	1%	0%	-8%			
ABB Group	15%	6%	3%	24%	-1%	6%	2%	7%			

Regional comparable growth rate reconciliation by Business Area – Year to date

	H1 2022 compared to H1 2021									
		Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign				
	(as	exchange	Portfolio		(as	exchange	Portfolio			
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable		
Europe	10%	13%	0%	23%	-2%	12%	0%	10%		
The Americas	35%	1%	0%	36%	14%	0%	0%	14%		
of which: United States	40%	0%	0%	40%	12%	0%	0%	12%		
Asia, Middle East and Africa	4%	3%	0%	7%	2%	3%	0%	5%		
of which: China	1%	1%	0%	2%	-4%	0%	0%	-4%		
Electrification	17%	5%	0%	22%	5%	5%	0%	10%		

	H1 2022 compared to H1 2021									
		Order growth rate				Revenue growth rate				
	US\$	Foreign			US\$	Foreign				
	(as	exchange	Portfolio		(as	exchange	Portfolio			
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable		
Europe	10%	14%	0%	24%	-4%	11%	1%	8%		
The Americas	2%	1%	35%	38%	-16%	1%	29%	14%		
of which: United States	3%	0%	40%	43%	-17%	1%	31%	15%		
Asia, Middle East and Africa	22%	3%	1%	26%	-6%	2%	1%	-3%		
of which: China	13%	1%	1%	15%	-5%	0%	1%	-4%		
Motion	11%	6%	12%	29%	-9%	5%	10%	6%		

			H1 2022 compared to H1 2021							
		Order grov	wth rate		Revenue growth rate					
	US\$	Foreign			US\$	Foreign				
	(as	exchange	Portfolio		(as	exchange	Portfolio			
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable		
Europe	-11%	9%	0%	-2%	-1%	10%	0%	9%		
The Americas	38%	1%	0%	39%	16%	2%	0%	18%		
of which: United States	30%	0%	0%	30%	26%	1%	0%	27%		
Asia, Middle East and Africa	15%	5%	0%	20%	-1%	5%	0%	4%		
of which: China	17%	1%	0%	18%	-18%	1%	0%	-17%		
Process Automation	9%	6%	0%	15%	3%	6%	0%	9%		

				H1 2022 compa	ed to H1 2021			
		Order grov	wth rate		Revenue growth rate			
	US\$	Foreign			US\$	Foreign		
	(as	exchange	Portfolio		(as	exchange	Portfolio	
Region	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable
Europe	24%	13%	-2%	35%	-13%	10%	-2%	-5%
The Americas	35%	0%	0%	35%	6%	0%	0%	6%
of which: United States	35%	0%	0%	35%	3%	0%	0%	3%
Asia, Middle East and Africa	48%	2%	0%	50%	-21%	2%	0%	-19%
of which: China	66%	0%	0%	66%	-21%	0%	0%	-21%
Robotics & Discrete Automation	34%	8%	-2%	40%	-13%	5%	-1%	-9%

Order backlog growth rate reconciliation

	June 30	, 2022 compar	ed to June 30	0, 2021
	US\$	Foreign		
	(as	exchange	Portfolio	
Business Area	reported)	impact	changes	Comparable
Electrification	33%	9%	0%	42%
Motion	28%	15%	0%	43%
Process Automation	3%	9%	0%	12%
Robotics & Discrete Automation	82%	15%	0%	97%
ABB Group	26%	10%	1%	37%

Other growth rate reconciliations

				Q2 2022 compai	ed to Q2 2021				
		Service orders	growth rate		Services revenues growth rate				
	US\$	Foreign			US\$	Foreign			
	(as	exchange	Portfolio		(as	exchange	Portfolio		
Business Area	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable	
Electrification	5%	7%	0%	12%	-5%	7%	0%	2%	
Motion	6%	8%	0%	14%	-7%	8%	0%	1%	
Process Automation	4%	8%	0%	12%	-2%	8%	0%	6%	
Robotics & Discrete Automation	1%	9%	0%	10%	-5%	9%	0%	4%	
ABB Group	4%	8%	0%	12%	-3%	7%	0%	4%	

				H1 2022 compai	ed to H1 2021			
	-	Service orders	growth rate		Services revenues growth rate			
	US\$	Foreign			US\$	Foreign		
	(as	exchange	Portfolio		(as	exchange	Portfolio	
Business Area	reported)	impact	changes	Comparable	reported)	impact	changes	Comparable
Electrification	10%	6%	0%	16%	-1%	5%	0%	4%
Motion	10%	7%	0%	17%	-4%	6%	0%	2%
Process Automation	5%	7%	0%	12%	1%	6%	0%	7%
Robotics & Discrete Automation	6%	8%	0%	14%	-3%	7%	0%	4%
ABB Group	7%	7%	0%	14%	-1%	6%	0%	5%

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,
- other income/expense relating to the Power Grids joint venture,
- 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 impairments and certain other fair value changes, 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.

Other income/expense relating to the Power Grids joint venture

Other income/expense relating to the Power Grids joint venture consists of amounts recorded in Income from continuing operations before taxes relating to the divested Power Grids business including the income/loss under the equity method for the investment in Hitachi Energy Ltd. (Hitachi Energy), amortization of deferred brand income as well as changes in value of other obligations relating to the divestment.

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

_	Six months en	ded June 30,	Three months ended June 30,		
(\$ in millions)	2022	2021	2022	2021	
Operational EBITA	2,133	2,072	1,136	1,113	
Acquisition-related amortization	(119)	(129)	(59)	(64)	
Restructuring, related and implementation costs ⁽¹⁾	(280)	(53)	(264)	(18)	
Changes in obligations related to divested businesses	17	(6)	3	(4)	
Changes in pre-acquisition estimates	1	(8)	2	(2)	
Gains and losses from sale of businesses	(4)	9	(4)	12	
Acquisition- and divestment-related expenses and integration costs	(109)	(30)	(50)	(20)	
Other income/expense relating to the Power Grids joint venture	(37)	(19)	(2)	(2)	
Certain other non-operational items	(63)	74	(65)	86	
Foreign exchange/commodity timing differences in income from operations	(95)	(19)	(110)	(7)	
Income from operations	1,444	1,891	587	1,094	
Interest and dividend income	33	26	20	15	
Interest and other finance expense	(62)	(91)	(40)	(36)	
Non-operational pension (cost) credit	68	88	32	38	
Income from continuing operations before taxes	1,483	1,914	599	1,111	
Income tax expense	(434)	(574)	(193)	(322)	
Income from continuing operations, net of tax	1,049	1,340	406	789	
Loss from discontinued operations, net of tax	(20)	(36)	(9)	(8)	
Net income	1,029	1,304	397	781	

⁽¹⁾ Includes impairment of certain assets.

		TI	hree months end	ed June 30, 2022	!	
					Corporate and	
				Robotics &	Other and	
			Process	Discrete	Intersegment	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	elimination	Consolidated
Total revenues	3,531	1,626	1,529	732	(167)	7,251
Foreign exchange/commodity timing						
differences in total revenues:						
Unrealized gains and losses						
on derivatives	36	(1)	37	9	4	85
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	8	1	5	_	24	38
Unrealized foreign exchange movements						
on receivables (and related assets)	(22)	(4)	(10)	(8)	(9)	(53)
Operational revenues	3,553	1,622	1,561	733	(148)	7,321
Income (loss) from operations	465	231	175	43	(327)	587
Acquisition-related amortization	30	7	1	19	2	59
Restructuring, related and						
implementation costs ⁽¹⁾	8	_	_	2	254	264
Changes in obligations related to						
divested businesses	_	_	_	_	(3)	(3)
Changes in pre-acquisition estimates	-	_	-	(2)	-	(2)
Gains and losses from sale of businesses	-	4	-	-	-	4
Acquisition- and divestment-related expenses						
and integration costs	10	3	36	2	(1)	50
Other income/expense relating to the						
Power Grids joint venture	_	_	_	_	2	2
Certain other non-operational items	22	_	_	1	42	65
Foreign exchange/commodity timing						
differences in income from operations:						
Unrealized gains and losses on derivatives						
(foreign exchange, commodities,						
embedded derivatives)	75	23	12	1	7	118
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	6	1	7	(1)	20	33
Unrealized foreign exchange movements				.,		
on receivables/payables						
(and related assets/liabilities)	(17)	(3)	(7)	(5)	(9)	(41)
Operational EBITA	599	266	224	60	(13)	1,136
Operational EBITA margin (%)	16.9%	16.4%	14.3%	8.2%	n.a.	15.5%
operational EbitA margin (70)	10.570	±0.70	17.5 /0	J.L 76	11.a.	13.3

 $^{{\}rm (1)} \quad {\rm Includes\ impairment\ of\ certain\ assets}.$

In the three months ended June 30, 2022, Certain other non-operational items in the table above includes the following:

		Three months ended June 30, 2022								
				Robotics &						
			Process	Discrete	Corporate					
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	and Other	Consolidated				
Certain other non-operational items:										
Regulatory, compliance and legal costs	_	_	_	_	5	5				
Business transformation costs ⁽¹⁾	1	_	_	_	39	40				
Other non-operational items	21	_	_	1	(2)	20				
Total	22	_	_	1	42	65				

 $[\]textbf{(1)} \quad \textbf{Amounts include ABB Way process transformation costs of $39 million for the three months ended June 30, 2022.}$

		TI	hree months end	ed June 30, 2021		
					Corporate and	
				Robotics &	Other and	
			Process	Discrete	Intersegment	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	elimination	Consolidated
Total revenues	3,406	1,850	1,540	832	(179)	7,449
Foreign exchange/commodity timing						
differences in total revenues:						
Unrealized gains and losses						
on derivatives	(7)	(14)	2	-	-	(19)
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	(1)	_	(5)	_	(1)	(7)
Unrealized foreign exchange movements						
on receivables (and related assets)	10	3	(1)	2	(1)	13
Operational revenues	3,408	1,839	1,536	834	(181)	7,436
Income (loss) from operations	549	303	190	74	(22)	1,094
Acquisition-related amortization	29	13	1	21		64
Restructuring, related and						
implementation costs	4	4	10	_	_	18
Changes in obligations related to						
divested businesses	_	_	_	_	4	4
Changes in pre-acquisition estimates	2	_	_	_	_	
Gains and losses from sale of businesses	1	(1)	(13)	_	1	(12)
Acquisition- and divestment-related expenses		.,,	. ,			
and integration costs	12	4	3	_	1	20
Other income/expense relating to the						
Power Grids joint venture	_	_	_	_	2	2
Certain other non-operational items	(9)	1	2	_	(80)	(86)
Foreign exchange/commodity timing	<u> </u>					•
differences in income from operations:						
Unrealized gains and losses on derivatives						
(foreign exchange, commodities,						
embedded derivatives)	4	(2)	2	_	4	8
Realized gains and losses on derivatives		(-)	_			
where the underlying hedged						
transaction has not yet been realized	(1)	1	(2)	(1)	(4)	(7)
Unrealized foreign exchange movements	\+/		(-)	(1)	(+)	(1)
on receivables/payables						
(and related assets/liabilities)	1	2	(1)	2	2	(
Operational EBITA	592	325	192	96	(92)	1,113
•						
Operational EBITA margin (%)	17.4%	17.7%	12.5%	11.5%	n.a.	15.0%

In the three months ended June 30, 2021, Certain other non-operational items in the table above includes the following: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left($

		T	hree months end	ed June 30, 2021		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	and Other	Consolidated
Certain other non-operational items:						
Certain other fair values changes,						
including asset impairments	(10)	_	_	_	(86)	(96)
Business transformation costs ⁽¹⁾	1	-	-	-	18	19
Other non-operational items	-	1	2	_	(12)	(9)
Total	(9)	1	2	_	(80)	(86)

⁽¹⁾ Amounts include ABB Way process transformation costs of \$18 million for the three months ended June 30, 2021.

		:	Six months ende	d June 30, 2022		
					Corporate and	
				Robotics &	Other and	
			Process	Discrete	Intersegment	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	elimination	Consolidated
Total revenues	6,858	3,198	3,035	1,462	(337)	14,216
Foreign exchange/commodity timing						
differences in total revenues:						
Unrealized gains and losses						
on derivatives	24	3	36	11	3	77
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	10	2	2	_	27	41
Unrealized foreign exchange movements						
on receivables (and related assets)	(22)	(6)	(7)	(5)	(11)	(51)
Operational revenues	6,870	3,197	3,066	1,468	(318)	14,283
Income (loss) from operations	971	485	326	65	(403)	1,444
Acquisition-related amortization	61	15	2	40	1	119
Restructuring, related and						
implementation costs ⁽¹⁾	10	8	5	3	254	280
Changes in obligations related to						
divested businesses	_	_	_	_	(17)	(17)
Changes in pre-acquisition estimates	1	_	_	(2)		(1)
Gains and losses from sale of businesses	_	4	_		_	
Acquisition- and divestment-related expenses						
and integration costs	29	8	69	3	_	109
Other income/expense relating to the						
Power Grids joint venture	_	_	_	_	37	37
Certain other non-operational items	(8)	_	_	1	70	63
Foreign exchange/commodity timing						
differences in income from operations:						
Unrealized gains and losses on derivatives						
(foreign exchange, commodities,						
embedded derivatives)	54	22	18	4	2	100
Realized gains and losses on derivatives	- -			<u> </u>	_ _	
where the underlying hedged						
transaction has not yet been realized	8	1	4	(1)	23	35
Unrealized foreign exchange movements	<u> </u>			(1)		
on receivables/payables						
(and related assets/liabilities)	(17)	(3)	(4)	(4)	(12)	(40)
Operational EBITA	1,109	540	420	109	(45)	2,133
•	·				(-3)	
Operational EBITA margin (%)	16.1%	16.9%	13.7%	7.4%	n.a.	14.9%

⁽¹⁾ Includes impairment of certain assets.

In the six months ended June 30, 2022, Certain other non-operational items in the table above includes the following: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left($

		:	Six months ended	d June 30, 2022		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	and Other	Consolidated
Certain other non-operational items:						
Regulatory, compliance and legal costs	_	_	_	_	4	4
Certain other fair values changes,						
including asset impairments	(31)	_	_	_	(3)	(34)
Business transformation costs ⁽¹⁾	2	_	_	_	64	66
Other non-operational items	21	_	_	1	5	27
Total	(8)	-	_	1	70	63

 $[\]textbf{(1)} \quad \textbf{Amounts include ABB Way process transformation costs of \$64 million for the six months ended June 30, 2022.}$

			Six months ende	d June 30, 2021		
					Corporate and	
				Robotics &	Other and	
			Process	Discrete	Intersegment	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	elimination	Consolidated
Total revenues	6,546	3,517	2,947	1,685	(345)	14,350
Foreign exchange/commodity timing						
differences in total revenues:						
Unrealized gains and losses						
on derivatives	22	13	14	5	4	58
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	(1)	_	(7)	(1)	(1)	(10)
Unrealized foreign exchange movements						
on receivables (and related assets)	(9)	(5)	(6)	(5)	(3)	(28)
Operational revenues	6,558	3,525	2,948	1,684	(345)	14,370
Income (loss) from operations	989	568	337	156	(159)	1,891
Acquisition-related amortization	58	26	2	41	2	129
Restructuring, related and						
implementation costs	21	5	13	5	9	53
Changes in obligations related to						
divested businesses	_	_	_	_	6	6
Changes in pre-acquisition estimates	8	_	-	-	_	8
Gains and losses from sale of businesses	4	(1)	(13)	-	1	(9)
Acquisition- and divestment-related expenses						
and integration costs	18	7	4	_	1	30
Other income/expense relating to the						
Power Grids joint venture	_	_	_	_	19	19
Certain other non-operational items	(15)	1	2	_	(62)	(74)
Foreign exchange/commodity timing						
differences in income from operations:						
Unrealized gains and losses on derivatives						
(foreign exchange, commodities,						
embedded derivatives)	29	12	12	1	2	56
Realized gains and losses on derivatives						
where the underlying hedged						
transaction has not yet been realized	(1)	1	(3)	(1)	(5)	(9)
Unrealized foreign exchange movements			. ,	.,	. ,	
on receivables/payables						
(and related assets/liabilities)	(8)	(5)	(7)	(1)	(7)	(28
Operational EBITA	1,103	614	347	201	(193)	2,072
Operational ERITA margin (%)	16 90/	17 40/	11 00/	11 00/	<u> </u>	14.4%
Operational EBITA margin (%)	16.8%	17.4%	11.8%	11.9%	n.a.	14.4

In the six months ended June 30, 2021, Certain other non-operational items in the table above includes the following:

		:	Six months ende	d June 30, 2021		
				Robotics &		
			Process	Discrete	Corporate	
(\$ in millions, unless otherwise indicated)	Electrification	Motion	Automation	Automation	and Other	Consolidated
Certain other non-operational items:						
Regulatory, compliance and legal costs	-	_	_	_	2	2
Certain other fair values changes,						
including asset impairments	(19)	-	_	_	(95)	(114)
Business transformation costs	4	_	_	_	35	39
Other non-operational items	-	1	2	_	(4)	(1)
Total	(15)	1	2	-	(62)	(74)

 $[\]textbf{(1)} \quad \textbf{Amounts include ABB Way process transformation costs of $33 \, million for the six months ended June 30, 2021.}$

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, Restricted cash (current and non-current) and Marketable securities and short-term investments.

Reconciliation

(\$ in millions)	June 30, 2022	December 31, 2021
Short-term debt and current maturities of long-term debt	2,830	1,384
Long-term debt	5,086	4,177
Total debt (gross debt)	7,916	5,561
Cash and equivalents	2,412	4,159
Restricted cash - current	23	30
Marketable securities and short-term investments	945	1,170
Restricted cash - non-current	301	300
Cash and marketable securities	3,681	5,659
Net debt (cash)	4,235	(98)

Net debt/Equity ratio

Definition

Net debt/Equity ratio

Net debt/Equity ratio is defined as Net debt divided by Equity.

Equity

Equity is defined as Total stockholders' equity.

Reconciliation

(\$ in millions, unless otherwise indicated)	June 30, 2022	December 31, 2021
Total stockholders' equity	12,586	15,957
Net debt (cash) (as defined above)	4,235	(98)
Net debt (cash) / Equity ratio	0.34	-0.01

Net debt/EBITDA ratio

Definition

Net debt/EBITDA ratio

Net debt/EBITDA ratio is defined as Net debt divided by EBITDA.

EBITDA

EBITDA is defined as Income from operations for the trailing twelve months preceding the balance sheet date before depreciation and amortization for the same trailing twelve-month period.

Reconciliation

(\$ in millions, unless otherwise indicated)	June 30, 2022	June 30, 2021
Income from operations for the three months ended:		
June 30, 2022 / 2021	587	1,094
March 31, 2022 / 2021	857	797
December 31, 2021 / 2020	2,975	578
September 30, 2021 / 2020	852	71
Depreciation and Amortization for the three months ended:		
June 30, 2022 / 2021	207	230
March 31, 2022 / 2021	210	227
December 31, 2021 / 2020	216	229
September 30, 2021 / 2020	220	231
EBITDA	6,124	3,457
Net debt (as defined above)	4,235	2,259
Net debt / EBITDA	0.7	0.7

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, (c) pension and other employee benefits, (d) payables under the share buyback program, (e) liabilities related to certain other restructuring-related activities and (f) liabilities related to the divestment of the Power Grids business); 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)	June 30, 2022	June 30, 2021
Net working capital:		
Receivables, net ⁽¹⁾	6,960	7,113
Contract assets	965	1,087
Inventories, net	5,595	4,700
Prepaid expenses	262	229
Accounts payable, trade	(4,805)	(4,708)
Contract liabilities	(2,141)	(1,846)
Other current liabilities ⁽²⁾	(3,173)	(3,324)
Net working capital	3,663	3,251
Total revenues for the three months ended:		
June 30, 2022 / 2021	7,251	7,449
March 31, 2022 / 2021	6,965	6,901
December 31, 2021 / 2020	7,567	7,182
September 30, 2021 / 2020	7,028	6,582
Adjustment to annualize/eliminate revenues of certain acquisitions/divestments	(213)	-
Adjusted revenues for the trailing twelve months	28,598	28,114
Net working capital as a percentage of revenues (%)	12.8%	11.6%

⁽¹⁾ Amount excludes receivables related to sales of investments outstanding at June 30, 2021.

⁽²⁾ Amounts exclude \$1,104 million and \$705 million at June 30, 2022 and 2021, respectively, related primarily to (a) income taxes payable, (b) current derivative liabilities, (c) pension and other employee benefits, (d) payables under the share buyback program, (e) liabilities related to certain restructuring-related activities and (f) liabilities related to the divestment of the Power Grids business.

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 Adjusted net income attributable to ABB.

Adjusted net income attributable to ABB

Adjusted net income attributable to ABB is calculated as net income attributable to ABB adjusted for: (i) impairment of goodwill, (ii) losses from extinguishment of debt, and (iii) gains arising on the sale of both the Mechanical Power Transmission Division (Dodge) and Power Grids business, the latter being included in discontinued operations.

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 (as adjusted) in the twelve months preceding the relevant balance sheet date.

Free cash flow conversion to net income

	Twelve mon	Twelve months to			
(\$ in millions, unless otherwise indicated)	June 30, 2022	December 31, 2021			
Net cash provided by operating activities – continuing operations	1,973	3,338			
Adjusted for the effects of continuing operations:					
Purchases of property, plant and equipment and intangible assets	(865)	(820)			
Proceeds from sale of property, plant and equipment	136	93			
Free cash flow from continuing operations	1,244	2,611			
Net cash provided by (used in) operating activities – discontinued operations	(40)	(8)			
Free cash flow	1,204	2,603			
Adjusted net income attributable to ABB ⁽¹⁾	2,132	2,416			
Free cash flow conversion to net income	56%	108%			

⁽¹⁾ Adjusted net income attributable to ABB for the year ended December 31, 2021, is adjusted to exclude the gain on the sale of Dodge of \$2,195 million and reductions to the gain on the sale of Power Grids of \$65 million.

Reconciliation of the trailing twelve months to June 30, 2022

		operations	Discontinued operations				
Net cash provided by continuing operating activities	Purchases of property, plant and equipment and intangible assets	Proceeds from sale of property, plant and equipment	Net cash provided by (used in) discontinued operating activities	Purchases of property, plant and equipment and intangible assets	Proceeds from sale of property, plant and equipment	Adjusted net income attributable to ABB ⁽¹⁾	
1,119	(166)	13	(15)	-	_	657	
1,033	(361)	57	(13)	_	_	478	
(564)	(187)	35	(9)	_	_	609	
385	(151)	31	(3)	_	_	388	
1.072	(055)		(40)			2,132	
	provided by continuing operating activities 1,119 1,033 (564)	provided by continuing operating activities 1,119 (166) 1,033 (361) (564) (187) 385 (151)	provided by continuing operating activities 1,119 (166) 13 1,033 (361) 57 (564) (187) 35 385 (151) 31	Net cash provided by continuing operating activitiesPurchases of property, plant and equipment and intangible activitiesProceeds from sale of property, plant and equipment and equipment and equipment and equipment and equipment and equipmentProceeds from sale of property, plant and equipment1,119(166)13(15)1,033(361)57(13)(564)(187)35(9)385(151)31(3)	Net cash provided by continuing operating activitiesPurchases of property, plant and equipment and intangible activitiesProceeds from sale of property, plant and equipment activities1,119(166)13(15)-1,033(361)57(13)-(564)(187)35(9)-385(151)31(3)-	Net cash provided by continuing operating activitiesPurchases of property, plant and equipment activitiesProceeds from sale of property, plant and equipment and intangible activitiesProceeds from sale of property, plant and equipment and equipmentPurchases of property, plant and equipment and equipment activitiesPurchases of property, plant and equipment and equipment and intangible activitiesPurchases of property, plant and equipment and equipment and equipment1,119(166)13(15)——1,033(361)57(13)——(564)(187)35(9)——385(151)31(3)——	

⁽¹⁾ Adjusted net income attributable to ABB for Q3 and Q4 of 2021 as well as Q1 and Q2 of 2022, is adjusted to exclude reductions to the gain on the sale of Power Grids of \$5 million, \$33 million, \$5 million and \$9 million, respectively. In addition, Q4 2021 is also adjusted to exclude the gain on the sale of Dodge of \$2,195 million.

Net finance expenses

Definition

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

Reconciliation

	Six months en	ded June 30,	Three months	Three months ended June 30,		
(\$ in millions)	2022	2021	2022	2021		
Interest and dividend income	33	26	20	15		
Interest and other finance expense	(62)	(91)	(40)	(36)		
Net finance expenses	(29)	(65)	(20)	(21)		

Book-to-bill ratio

Definition

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

Reconciliation

(\$ in millions, except Book-to-bill presented as a ratio)	Six months ended June 30,							
	2022				2021			
	Orders	Revenues	Book-to-bill	Orders	Revenues	Book-to-bill		
Electrification	8,434	6,858	1.23	7,224	6,546	1.10		
Motion	4,281	3,198	1.34	3,864	3,517	1.10		
Process Automation	3,511	3,035	1.16	3,211	2,947	1.09		
Robotics & Discrete Automation	2,417	1,462	1.65	1,809	1,685	1.07		
Corporate and Other (incl. intersegment eliminations)	(463)	(337)	n.a.	(363)	(345)	n.a.		
ABB Group	18,180	14,216	1.28	15,745	14,350	1.10		

(\$ in millions, except Book-to-bill presented as a ratio)	Three months ended June 30,							
	2022			2021				
	Orders	Revenues	Book-to-bill	Orders	Revenues	Book-to-bill		
Electrification	4,037	3,531	1.14	3,693	3,406	1.08		
Motion	2,079	1,626	1.28	1,947	1,850	1.05		
Process Automation	1,819	1,529	1.19	1,555	1,540	1.01		
Robotics & Discrete Automation	1,109	732	1.52	968	832	1.16		
Corporate and Other (incl. intersegment eliminations)	(237)	(167)	n.a.	(174)	(179)	n.a.		
ABB Group	8,807	7,251	1.21	7,989	7,449	1.07		

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