

ABB India

Headwinds remain

Key takeaways from ABB's CY20 AR are as follows: (1) The share of exports in the revenue has grown from 11% to 18% over CY17-19; (2) Switchgear/Electrical Control, Supply/Motors, and other machines delivered robust CY17-19 revenue CAGR of 14/19/34% and contributed 31/24/19% to CY19 revenue (cumulative revenue mix of 74%); (3) net cash status of Rs 16bn. With clients conserving capital and global growth outlook bleak, new capex/opex headwinds remain. ABB's performance is highly sensitive to demand outlook. A challenging 2QCY20 with slow ramp-up in revenue will limit further re-rating. We believe headwinds are not fully priced into current rich valuations (51.3x Mar-22E EPS). Maintain SELL with TP of Rs 755/sh.

- **Composition of product and business segments:** while ABB's product segments can be broadly categorized into (1) Switchgear, (2) Motors & Generators, (3) Drives & Electronics, and (4) Services, its business segments are centered around solutions provided to customers: (1) Motion, (2) Robotics, (3) Electrification and (4) Industrial Automation (IA). Electrification and Motion constitute ~75% of revenue and bulk of the profitability. Robotics remains small, as of now, and IA is suffering from high under-absorption, apart from a few legacy lower margin infrastructure and power projects, due to sluggish rate of growth in investments in greenfield refinery, thermal power and petrochemical domain. Consolidation in the steel market and slowdown in the auto sector have impacted CAPEX additions and production.
- **Power Grids (PG) demerger and Solar inverter business sale:** During the year, PG business was demerged to APPSIL and listed separately. PG offered HV products and solutions across the generation, T&D value chain apart from railways and EV charging. This was part of a global deal to sell the PG business to Hitachi. With this cyclical chunky project-based business now hived off, ABB is a pure-play product and value-add services-based entity with short cycle orders. Sale of Solar Inverters business (7-8% of revenues, thin margins, 50:50 domestic: exports) will also be margin accretive.
- **While exports continue to drive growth, prime focus to be on domestic markets:** Exports contributed 18% to CY19 revenue (13/11% in CY18/17). ABB registered double-digit growth for the third year in exports, embarking on a journey of "Make in India for the World". With capacity expansion not being a constraint as land is available, focus is firstly on domestic business stabilization and profitability, bringing quality to international standards, and then going in for export-driven growth. So, exports would remain ~20% of revenue.
- **Key growth drivers:** ABB stands to benefit from impetus given to railways electrification; MRTS construction is planned over 26 cities; gas & water distribution infra opportunities would emerge in the Smart Cities Mission (AMRUT). While capex remains elusive, increasing digitization across core industries like cement, metal/mining, marine, oil & gas, etc., and deeper tier-2/3 cities' penetration will lead the next leg of growth. Digitisation opportunities would emerge in process industries, pharma, F&B, and data centers.

Financial summary*

(Rs mn, Dec year-end)	CY17	CY18	CY19	CY20E	CY21E	CY22E
Net Revenues	60,937	66,901	73,151	59,466	75,135	83,349
EBITDA	4,146	4,578	5,312	959	5,290	6,293
APAT	2,255	2,542	3,719	1,024	3,641	4,319
Diluted EPS (Rs)	10.6	12.0	17.6	4.8	17.2	20.4
P/E (x)	86.0	76.3	52.1	189.3	53.3	44.9
EV / EBITDA (x)	44.0	39.1	33.5	187.1	33.8	28.3
RoE (%)	6.5	6.7	9.9	2.9	9.9	11.0

Source: Company, HSIE Research, * Ex discontinued Power Grids Business

SELL

CMP(as on 10 July 2020)	Rs 915
Target Price	Rs 755
NIFTY	10,768

KEY CHANGES	OLD	NEW
Rating	SELL	SELL
Price Target	Rs 755	Rs 755
EBITDA %	CY21E	CY22E
	-	-

KEY STOCK DATA

Bloomberg code	ABB IN
No. of Shares (mn)	212
MCap (Rs bn) / (\$ mn)	194/2,583
6m avg traded value (Rs mn)	139
52 Week high / low	Rs 1,442/722

STOCK PERFORMANCE (%)

	3M	6M	12M
Absolute (%)	(1.1)	(33.2)	(32.7)
Relative (%)	(18.5)	(21.2)	(27.7)

SHAREHOLDING PATTERN (%)

	Dec-19	Mar-20
Promoters	75.00	75.00
FIs & Local MFs	11.67	11.61
FPIs	3.38	3.31
Public & Others	9.95	10.08
Pledged Shares	0.0	0.0

Source : BSE

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IA exposed to Oil & Gas, pulp & paper, cement, steel/metals, etc. RA exposed largely to auto/auto ancillaries. Within Electrification, focus on buildings including - metro, water, automotive, airports. & data centers

Localization initiatives:

Material costs have been trending lower from 67.5%/66.5% in CY18/19 to ~65% in 1QCY20

Exports: Global success of LV IEV motors drove biggest ever growth for Motion exports. While Middle East & Africa continued to be strong markets for ABB process solutions offerings, inroads in Latin America were made with MV breakers & auto reclosers. While Robotics domestic segment continues to face headwinds as it is largely exposed to the automotive sector, exports in this segment posted significant growth

Key orders received during 1QCY20 include:

- Order from Indian Railways for propulsion equipment and converters
- Order for wind turbine generators and energy efficiency drives for the energy sector
- Order for SCADA-based solution that controls and monitors gas flow in tea estates spread across a northeastern state
- FGD project orders
- Order for analyzer systems for a green-field project in the pulp & paper sector
- Low voltage switchgear and busbar orders for electrical major

- **RoCE healthy even as RoE suppressed by high balance sheet cash:** While ABB's RoIC for CY19 stood at 17.2%, RoE was 9.9% due to lower yield of high cash equivalents at ~3.5%.
- **Key projects/sectors where ABB solutions are an integral part:** (1) Kaleshwaram lift irrigation project (mega motors, drives, relays), (2) Traction solutions for Indian Railways, (3) GIS power distribution equipment for metros (Nagpur/Mumbai/Pune), (4) Digitization orders in cement, mining, marine & data storage, (5) IoT enabled automating paint shop operations for an automobile giant, (6) Smart power distribution technology to monitor water supply & gas transportation for Smart Cities project, (7) ATS for Bengaluru & Mangalore airports, (8) SCADA for Oil & Gas sector, (9) Drives & sensors for food chains, steel & power plants, Statue of Unity, etc.
- **More digitized solutions help ABB differentiate & drive Services revenues:** with its digital 'ABB Ability' platform & decades of experience with client processes, ABB is continually offering more digitized solutions across industries to enable them make better real-time cloud-storage data driven decisions and more holistic asset management, leading to efficiency gains. ABB Ability is not a standalone offering per se, but adds a digital enablement layer for connectivity across equipment, and data collection and programming.
- **Financial Risk Management:** ABB is exposed to -
 - (1) Market risk (interest rate, currency, commodity price, etc): Commodity future contracts outstanding as on CY19
 - (a) Copper – 121 BUY contracts for 2,466 MTs
 - (b) Silver - 53 BUY contracts for 96,635 ounce
 - (2) Foreign currency risk: it arises from future transactions as well as recognized foreign assets & liabilities (primarily CHF) on the BS. Unhedged CHF exposure is minimal – (a) Receivables (Rs 167.5mn) (b) Payables (Rs 800mn).

Exposure to commodities

Commodity Name – INR Mn	Exposure in INR Mn	Exposure in Quantity	% of such exposure hedged*
Copper	2616	6,188 MT	90%
Aluminium	27	214 MT	90%
Silver	205	5.1 MT	90%

Source: Company AR; * via International OTC markets

Forward Contracts Outstanding

INR Mn	Exports		Imports	
	2019	2018	2019	2018
CHF	133	304	1,116	1,430
EUR	938	1,561	4,258	3,664
SEK	373	2,141	502	2,785
USD	4,559	7,546	3,260	4,571
Others	253	127	484	659
Total	6,256	11,679	9,620	13,110

Source: Company AR

Forex earned/used

INR Mn	2015	2016	2017	2018	2019
Forex earned	10,662	12,975	12,292	16,340	14,680
Forex used	26,911	29,753	32,935	45,590	37,500

Source: Company AR

- (3) Credit risk: from trade receivables, which are spread across a large number of customers and industries; doubtful debts 100% provided for. Provisions as on CY19 at Rs 3.7bn.
- (4) Liquidity risk: liabilities due in CY20 stood at Rs 31bn.

Operational Performance

Segment	Segmental Performance & Outlook	Major orders booked	Major orders executed
Electrification	<ul style="list-style-type: none"> From emerging high growth segments to deeper penetration of the tier 2 markets with greater focus on exports and service Consolidation of LV & MV solutions of digitalization offerings for Indian buildings will render next level building management efficiency. TrueOne ATS, Compact MCB, UMC Relays, Terra EV Chargers, Relion Relays, Wavepro Busways are some of the products which have served the customers in 2019 also. Export growth in MV breakers and switches was a success story Solar inverter business sold to FIMER 	<ul style="list-style-type: none"> ABB will provide 33kV Primary AIS, GIS & 25kV Traction GIS for power distribution for the metro rail for Pune, Bangalore and Mumbai metros. ELDS booked largest order of LVS for TATA Steel for their expansion (from 5 to 10 MTPA) at Kalinganagar. An important order for "Shri Mata Vaishno Devi Shrine Board, Katra for reliable and smart power distribution along the route. Penetrated Datacenter segment with important orders from a retail & Cloud Computing Companies Orders for smart cities of Ujjain and Ranchi for RMU and CSS 	<ul style="list-style-type: none"> Building automation solutions for leading hospitality chain's property in Kolkata, New Delhi and Amritsar Largest order for MyRemoteCare, for the remote condition monitoring of electrical panels in main plant of the largest tyre manufacturer in the country Successful commissioning of First 25kV traction GIS helping run first phase of Nagpur Metro Focused approach towards Digitalization initiatives enabled to Book first order of Zenon SCADA for a leading carbon black manufacturer to support customer for remote monitoring & control
Motion	<ul style="list-style-type: none"> The segment sustained its growth momentum in 2019 despite the challenging business environment. 2 business lines - drives and motors & generators upheld its position Export earnings increased Sectors like Transportation, Steel and Water & Waste Water have been performing well <u>however, Cement, Power and Oil & Gas have shown signs of slowing but are expected to bounce back in the coming quarters.</u> F&B, HVAC, metal, COG segments continued to offer new opportunities and remained growth drivers. Revival of the wind business further propelled the overall growth momentum of motors and generators business line. 	<ul style="list-style-type: none"> <u>Single largest MV motor order from Sulzer India for an international oil major's CRISP project</u> <u>Bagged the largest order</u> for IE 4 motor from SMC power, along with smart sensors CST / MPT order for 32 nos long distance coal conveyer Large Drive order for crane application from KONE cranes for JSW Revival of Gamesa order for wind generators Propulsion system and composite converter orders from Chittaranjan Locomotive Works (CLW) and Diesel Locomotive Works (DLW), Varanasi <u>Aux converter order from Alstom for the Montreal Metro project</u> 	<ul style="list-style-type: none"> Kaleshwaram Lift Irrigation Project: Deployed its large synchronous motors, load commutated inverter (LCI) drive solution, control relay panels, switchgears and breakers for this mega project. <u>Offering slip-ring and square cage induction motors, the Vadodara motor manufacturing unit became a global feeder factory to meet the growing demands of the MEA, Latin America and US region</u> Opened a new motor testing facility and expanded LV motor manufacturing line at Faridabad to cater to the MEA demand New Drive Service Workshop inaugurated at ABB's Faridabad facility for repair, exchange and reconditioning <u>Expanded traction converter line and introduced ACS580 MV drive at Nelamangala facility</u>

Segment	Segmental Performance & Outlook	Major orders booked
Industrial Automation	<ul style="list-style-type: none"> Growth and focus on the gas transportation, distribution, hydro power and water automation segments helped make up <u>sluggish rate of growth in investments in greenfield refinery, thermal power and petrochemical domain.</u> In the transportation segment, the turbocharging business secured a good market share. The business will expand the portfolio with new product developments and digital applications in locomotives, as the rail market is undergoing modernization phase. <u>In the power generation segment, headwinds due to low PLF and shifting to renewable energy sources.</u> Clean fuel projects initiatives by Government of India has helped the business line get business opportunities in gasoline blending packages from refineries. <u>FGD projects helped growth</u> <u>Consolidation in the steel market and slowdown in the auto sector has impacted new CAPEX additions and production.</u> 	<ul style="list-style-type: none"> Orders from HPCL, IOCL for BSVI Advanced Blending application; Gas distribution solutions from Mahanagar Gas for city of Mumbai and GAIL Gas limited for city of Bangalore; Gas transportation and pipeline solutions – major contributor to country's clean fuel initiative Order for Electrical Technical room and Instrument & Telecom room Order for automation of Hydro Power and Water process plant <u>Breakthrough order for Datacenter automation for multiple locations</u> <u>First breakthrough for digitalization order in mining Sector</u> New customers in the mining space for aluminum smelter (electrification and instrumentation) and copper refinery (eBOP and instrumentation) Precision equipment and instrumentation package from refinery majors ABB Ability Tekomar XPERT for engine performance digital solutions for leading M Pallonji Logistics <u>Order from Indian conglomerate for container terminal electrics at Myanmar</u> Install electrification and automation systems at RCCPL's new plant
Robotics and Discrete Automation	<ul style="list-style-type: none"> <u>Despite difficult market conditions, Robotics business managed to grow in terms of revenue, order backlog, but lower inflows; made significant headway for exports</u> <u>Automotive manufacturers and component suppliers continued to face headwinds over policy uncertainties, hence reduced their capex</u> F&B, warehousing and consumer segments like electronics continued their investments towards modernization of capacities for productivity and efficiency 	<ul style="list-style-type: none"> Painting and sealing system from a major Indian and Japanese Automotive OEM <u>Robotic automation of multiple production sites of a major multinational consumer goods company</u> <u>Orders from leading consumer electronics brands to automate their local assembly lines</u>

Revenue Segmentation (excl. Power Grids)

INR Bn	Revenues			Growth %		Common-size			EBIT Margins		
	CY17	CY18	CY19	CY18	CY19	CY17	CY18	CY19	CY17	CY18	CY19
Geographical											
Domestic	55.9	58.5	60.2	5%	3%	89%	87%	82%			
Exports	6.9	8.4	13.0	21%	55%	11%	13%	18%			
Total	62.9	66.9	73.2	6%	9%	100%	100%	100%			
Business Segments											
Electrification	24.4	26.2	30.2	7%	15%	39%	39%	41%	11.5%	9.6%	9.8%
Motion	17.4	22.5	26.2	29%	16%	28%	34%	36%	8.4%	8.5%	9.2%
Robotics & DA	2.0	2.5	2.7	29%	8%	3%	4%	4%		11.5%	8.8%
IA	14.1	15.4	15.6	9%	1%	22%	23%	21%	12.1%	12.3%	6.1%
Intersegmental/Corporate	5.03	0.31	-1.57	-	-	8%	0%	-2%	-	-	-
Total	62.9	66.9	73.2	6%	9%	100%	100%	100%	9.8%	9.9%	9.0%
Products/Services											
Switchgear of all types	17.4	19.6	22.6	13%	15%	28%	29%	31%			
Electronic control and supply units for variable speed drives & other applications	12.4	16.5	17.5	32%	6%	20%	25%	24%			
Motors and other machines	7.7	9.5	13.9	22%	46%	12%	14%	19%			
Others	20.5	16.9	14.2	-17%	-16%	33%	25%	19%			
EPC & Services	4.1	3.7	4.2	-10%	13%	7%	6%	6%			
Other Operating Revenues	0.8	0.8	0.9	1%	12%	1%	1%	1%			
Total	62.9	66.9	73.2	6%	9%	100%	100%	100%			

Source: Company, HSIE Research

Post hiving of PG business, ABB is now a pure-play product & value-add services-based entity with short cycle orders

CY19 Channel Mix:

41% direct sales,
26% distributors,
33% EPCs

Market leading products like Emax2 digital circuit breakers, IE4 motors, ultra-low harmonic drives, & first made in India digital solution for real time condition monitoring – DigiSampler 2.0 were launched

ABB stands to be a beneficiary of China + 1 strategy of certain manufacturing MNCs materialises

Order Inflows Trend

INR Bn	CY17	CY18	Growth %	CY19	Growth %
Electrification	24.8	27.5	11.0%	29.7	7.8%
Motion		23.3		23.4	0.3%
Robotics & DA	20.1	3.1	31.4%	2.7	-12.4%
IA	15.3	17.0	11.5%	15.7	-7.5%
Total	60.1	70.9	17.9%	71.5	0.8%

Source: Company, HSIE Research

Order Book Trend

INR Bn	CY17	CY18	Growth %	CY19	Growth %
Electrification	11.7	13.4	14.3%	13.0	-2.6%
Motion		17.2		14.6	-15.2%
Robotics & DA	17.2	1.4	8.0%	1.4	5.9%
IA	11.6	13.4	15.7%	12.8	-3.9%
Total	40.5	45.3	12.0%	41.9	-7.5%

Source: Company, HSIE Research

Du-Pont Analysis

Year to December	CY17	CY18	CY19
NP margin (%)	3.7	3.8	5.1
Total assets turnover	1.5	1.7	2.0
Leverage multiplier	1.2	1.1	1.0
ROAE (%)	6.5	6.7	9.9

Source: Company, HSIE Research

Employees Trend

	CY15	CY16	CY17	CY18	CY19*
Permanent Employees	5,839	5,603	5,590	5,531	3,299
Employee expenses (INR Mn)	7,499	7,503	5,187	5,295	5,796
Subcontracting expenses (INR Mn)	4,664	5,077	3,123	2,263	2,219

Source: Company, HSIE Research; ~2244 employees transferred to APPSIL w.e.f. from Dec 01,2020

The Company's plants are located at Peenya and Nelamangala in Bengaluru, Maneja in Vadodara, Faridabad, Visakhapatnam and Nashik. It has 13 factories & 26 establishments in total

Divested segment of Power Grids (PG) offered power and automation products, systems, service and software solutions across the generation, transmission and distribution value chain. Its portfolio included grid integration, transmission, distribution and automation solutions and a complete range of high voltage products and transformers. This was a cyclical business which got divested

Related party transactions

Transactions with related parties

- Revenue from subsidiaries: Rs 10.97/9.39bn in CY19/18
- Purchases from subsidiaries: Rs 21.43/25.91bn in CY19/18
- Royalty, tech. & trade-mark fees: Rs 3.51/4.56bn in CY19/18
- IT & other expenditure: Rs 3.49/4.31bn in CY19/18
- Loan granted: Rs 3.48bn to APPSIL in 4QCY19; repaid in 1QCY20

Amount due to/from related parties

- Trade receivables: Rs 3.57/2.61bn in CY19/18
- Other assets: Rs 2.69/0.46bn in CY19/18 (Rs 2.4bn – APPSIL)
- Loan O/S of Rs 3.48bn to APPSIL; repaid in 1QCY20
- Trade payables: Rs 7.28/9.64bn in CY19/18
- Other liabilities: Rs 7.28/1.40bn in CY19/18 (Rs 5.9bn – ABB Global Ind, Bengaluru).

Composition of business segments

The Company's business segments are organized around products and system solutions provided to its customers, which include utilities, industries, channel partners and original equipment manufacturers.

- Motion segment (MO) provides products, solutions and related services that increase industrial productivity and energy efficiency. Its motors, generators and drives provide power, motion and control for a wide range of automation applications.
- Robotics and Discrete Automation segment (RA) provides value-added solutions in robotics, machine and factory automation.
- Electrification segment (EL) provides technology across the full electrical value chain from substation to the point of consumption, enabling safer and more reliable power. A range of digital and connected innovations for low- and medium-voltage, including EV infrastructure, solar inverters, modular substations, distribution automation, power protection, wiring accessories, switchgear, enclosures, cabling, sensing and control.
- Industrial Automation segment (IA) provides products, systems and services designed to optimize the productivity of industrial processes. Solutions include turnkey engineering, control systems, measurement products, life cycle services, outsourced maintenance and industry specific products. The industries served include oil and gas, power, chemicals and pharmaceuticals, pulp and paper, metals and minerals, marine and turbocharging.

Financial Performance

Summary P&L

(Rs mn, Dec year-end)	CY17	CY18	CY19	1QCY20
Net Sales	60,937	66,901	73,151	15,222
Material Cost	41,030	45,137	48,611	9,927
Employee Cost	5,187	5,295	5,796	1,633
Other Expenses	10,575	11,892	13,432	3,517
EBITDA	4,146	4,578	5,312	145
Depreciation	1,012	928	904	271
EBIT	3,133	3,650	4,408	(126)
Interest	572	539	214	34
Other Income	777	840	943	458
EO Items (gain)/loss	0	0	697	(568)
PBT	3,338	3,951	4,440	866
Tax	1,084	1,410	1,418	206
RPAT	2,255	2,542	3,022	660
EO Items (gain)/loss	0	0	697	(568)
APAT	2,255	2,542	3,719	92

Source: Company, HSIE Research

Margin Analysis

	CY17	CY18	CY19	1QCY20
Material Cost (% net sales)	67.3	67.5	66.5	65.2
Employee Cost (% net sales)	8.5	7.9	7.9	10.7
Other Expenses (% net sales)	17.4	17.8	18.4	23.1
EBITDA Margin (%)	6.8	6.8	7.3	1.0
Tax rate (%)	32.5	35.7	31.9	23.8
APAT Margin (%)	3.7	3.8	5.1	0.6

Source: Company, HSIE Research

Key CF Items & Return Ratios

Key CF Items	CY18	CY19
CFO	6,255	6,669
CFI	1,437	(431)*
CFF	(7,937)	(1,467)
NCF	(245)	4,771
Cash & Bank Balance	14,724	15,949
As % Networth	37%	45%
As % Mcap as on CY19/18	5.9%	5.9%
Key Return ratios		
RoIC	13.5%	17.2%
RoE	6.7%	9.9%
Yield on cash & bank balances	2.6%	3.5%
Tax Rate	35.7	31.9
EBIT Margin	5.5%	6.0%
Interest Cost as % sales	0.8%	0.3%

Source: Company, HSIE Research; * adding back Rs 3.5bn loan to ABPIL repaid in Jan-20

- Sale of Solar Inverter Business:** On March 30, 2020, the Company entered into a Business Transfer Agreement (BTA) with FIMER ('Marici India') for sale of Solar inverter business for a consideration of Rs 1.05Bn. During 4QCY19 ABB classified the assets as at December 31, 2019 pertaining to the Solar inverter Business as Assets held for sale and measured the same at lower of cost and fair value - fair value less costs to sell; Rs 0.7bn exceptional loss was realized in this regard in 4QCY19). Later, in 1QCY20 it reversed exceptional cost amounting to Rs 0.57bn representing consideration receivable in excess of net assets to be transferred due to higher realization of receivables.

EBITDA margins have improved in CY19 due to decline of ~100bps in material expenses driven by localization initiatives & lower credit costs, offset partially by higher fixed costs

APAT margins have also improved owing to debt reduction leading lower interest expenses, as well as lower credit costs

Margin improvement on account of localization initiatives. Sale of solar inverter business to be margin accretive as well

CFO: stable & healthy

CFI: positive in CY19 due to redemption of MF units of Rs 2.6bn

CFF: Rs 6bn of debt repayment in CY18

Impact of shifting to new tax rate of 25.17%: ABB shifted to new effective statutory tax rate of 25.17%. This rate was applicable for 2Q/3Q/4Q CY19, while for 1QCY19 applicable tax rate was 34.94% leading to statutory tax rate of 27.61%. However, ETR was 31.3% due to DTA revaluation at the new tax rate. CY20 onwards, ETR will be ~25-26%

Adjusting for Rs 3.5bn loan repaid by PG, OCA/NWC days would be lower by 17 days. However, this amount could have been used to reduce payables, leading to similar NWC days band of ~45 days. This is expected to rise to ~60-65 days in the near term as collections moderate due to COVID-19

High Contingent

Liabilities: ABB's CL has been ~20% over the past few years, owing to income tax disputes. However, the Company is contesting the demands and the management believes that its position will likely be upheld in the various appellate authorities/courts. The management believes that the ultimate outcome of this proceeding will not have a material adverse effect on the Company's financial position

- **RoIC improvement:** RoIC improvement in CY19 to 17.2% (from 13.5%), on account of Lower ETR. RoE suppressed by low yielding cash equivalents.

Net Working Capital Cycle

In Days Sales	CY18	CY19
Inventory (days)	51	43
Debtors (days)	92	97
Payables (days)	146	180
Cash Conversion (days)	(3)	(40)
Other Current Assets (days)	60	98
Other Current Liab (days)	13	12
Net Working Capital Cycle (Days)	44	46

Source: Company, HSIE Research

- **Stable NWC cycle:** ABB's NWC position is quite comfortable, which augurs well esp. in such times of COVID disruption. OCA appears optically high due to Rs 3.5bn ST loan provided to APPSIL, which was repaid in Jan-20.

Inventory, Capex, Depreciation, CFO

in Days Sales	CY18	CY19
Raw materials and components	34.3	26.8
Work-in-progress	10.2	9.3
Finished goods	4.4	5.2
Traded goods	1.6	1.7
Stores and spares	0.1	0.1
Total	51	43
INR Mn		
Sales	66,901	73,151
Net fixed assets	9,762	8,012
Fixed asset turnover	6.9	9.1
INR Mn		
Capex	2,360	1,215
as % Sales	3.5%	1.7%
as % Net Fixed Assets	24.2%	15.2%
INR Mn		
Depreciation	928	904
as % Sales	1.4%	1.2%
as % Net Fixed Assets	9.5%	11.3%
INR Mn		
Pre-tax CFO	4,007	4,931
EBIDTA	4,578	5,312
Pre-tax CFO / EBIDTA	0.88	0.93

Source: Company, HSIE Research

- **Incremental capex to be minimal; CFO healthy:** As ABB continues to grapple with subdued demand across various sectors, and sufficient headroom for capacity augmentation at existing locations to meet future domestic/export demand, major capex is not envisaged. Depreciation rate to also remain at current levels. With high CFO/EBIDTA, revenue recognition practices seem to be moderate.

Contingent liabilities

INR Mn	CY18	CY19
Excise duty /service tax and sales tax liabilities dispute	4,871	4,698
Custom duty liabilities in dispute	187	201
Income tax matters in dispute	132	144
Other matters	2,253	2,441
Total	7,443	7,483
Networth	40,073	35,201
As % Networth	19%	21%

Source: Company, HSIE Research

Netting-off debtors & creditors, ABB is a net cash company with Rs 16bn of cash as on Dec-20

Moderation in gearing ratio on account of increase in other payables

Transfer of assets and liabilities of discontinued operations (PG) led to Rs 6.7bn adjustment in net worth

Rs 3.6/1.7bn net fixed assets transferred to PG in CY18/19

All major R&D efforts are pooled centrally at the Group level. Local R&D activities undertaken by the Company were mainly in localizing the products, adoption of global products to local environment, carrying out cost saving actions and other improvements.

Capital Structure

INR Mn	2018	2019
Borrowings	20	71
Trade payables	18,745	19,016
Other financial liabilities	4,069	12,196
Less: cash and cash equivalents	(14,724)	(15,949)
Net debts	8,110	15,333
Total equity	40,073	35,201
Capital and net debt	48,183	50,534
Gearing ratio	16.83%	30.34%

Source: Company, HSIE Research

Statement of changes in equity

Equity as at December 31, 2018 – INR Mn	39,649
Profit for the year	3,034
Other comprehensive income/ (loss) (net of tax)	(38)
Demerger adjustment	(6,739)
Dividend paid	(1,017)
Dividend distribution tax	(209)
Change in accounting policy of retention discounting (net of tax)	98
Equity as at December 31, 2019	34,777

Source: Company, HSIE Research

Movement in Fixed & Intangible assets

Gross carrying value (INR Mn)	CY18	CY19
As at Beginning of year	14,224	11,058
Additions	2,392	1,533
Disposals	(498)	(298)
Transferred to Power Grids	(5,060)	(2,056)
Assets held for sale	-	(393)
As at year end	11,058	9,844
Accumulated depreciation		
As at Beginning of year	2,798	23,451
Depreciation charge	1,353	868
Disposals	(392)	(216)
Transferred to Power Grids	(1,413)	(316)
Assets held for sale	-	(35)
As at year end	2,345	2,646
Net carrying value	87,130	71,980

Source: Company, HSIE Research

Royalty, technology & trade mark fees expenses*

Rs Mn	2016	2017	2018	2019
Royalty, technology & trade mark fees (P&L)	3,730	3,870	4,570	3,510
Revenue from operations (P&L)*	91,840	93,750	1,08,620	82,100
As % Revenues	4.1%	4.1%	4.2%	4.3%

Source: Company, HSIE Research; * incl PG business

- **Royalty/R&D Policy:** As per its policy, ABB's payment to Group has two major components comprising technology cost (3.2% revenues) and trademark fees (1% revenues). Royalty, technology & trade mark fees expenses to be ~4.1-4.2% going forward as well, even as PG business has been carved out.
- ABB Group invests USD 1.5bn every year on R&D i.e. 5% of its annual revenues, with 8500 scientists and technologists working on best in class global technology around the globe. It has major R&D centers across more than 10 countries.

Provisioning Policy

- Provision for Warranties:** The Company provides warranties for its products, systems and services, undertaking to repair or replace the items that fail to perform satisfactorily during the warranty period. Provision made as at CY19 represents the amount of the expected cost based on technical evaluation and past experience of meeting such obligations. It is expected that this expenditure will be incurred over the contractual warranty period.

Movement in Warranty provisions

INR Mn	CY18	CY19
Warranties - Opening	1,493	864
Additions (+)	1,322	932
Amounts Used (-)	626	261
Unused Amounts reversed (-)	511	202
Provisions pertaining to discontinued operations/held for sale (-)	815	403
Warranties - Closing	864	930

Source: Company, HSIE Research

- Provision for Loss orders:** A provision for expected loss on construction contracts is recognized when it is probable that the contract costs will exceed total contract revenue. For all other contracts loss order provisions are made when the unavoidable costs of meeting the obligation under the contract exceed the currently estimated economic benefits.

Movement in Loss Orders provisions

INR Mn	CY18	CY19
Loss orders - Opening	373	173
Additions (+)	106	101
Amounts Used (-)	37	39
Unused Amounts reversed (-)	-	-
Provisions pertaining to discontinued operations/held for sale (-)	269	-
Loss orders - Closing	173	236

Source: Company, HSIE Research

- Debtors Provision:** Company does not track changes in credit risk. Rather, it recognizes impairment loss allowance based on lifetime ECLs at each reporting date, right from initial recognition. The Company uses a provision matrix to determine impairment loss allowance on the portfolio of trade receivables. The provision matrix is based on its historically observed default rates over the expected life of the trade receivable and is adjusted for forward looking estimates. At year end, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

Movement in provisions for doubtful debts/advances

INR Mn	CY18	CY19
Opening balance (BS)	5,883	5,783
Add: Additional ECL provision/(reversal)	(106)	(415)
Add: Additional provision/(reversal)	1,062	848
Less: Transferred on Demerger	-	1,916
Less: Write-offs/reversals	1,057	623
Closing balance (BS)	5,783	3,677

Source: Company, HSIE Research

Management does not expect any significant loss from non-performance by counterparties on credit granted during the financial year that has not been provided for

100% provisioning for doubtful debts. Written off when known to be uncollectible. Hence, Rs 3.7bn doubtful debts don't pose credit risk as 100% provided for.

Credit costs have come down significantly in CY19. We expect this to rise in CY20 due to lower revenues as well as weak economic environment leading to higher slippages

Credit costs

INR Mn	CY18	CY19
Bad debts/advances written-off (PL) net	243	(289)
Provision for Doubtful advances (PL)	687	489
Total credit costs	930	200
As % Sales	1.39%	0.27%

Source: Company, HSIE Research

- Individual receivables which are known to be uncollectible are written off by reducing the carrying amount of trade receivable and the amount of the loss is recognized in the statement of profit and loss within other expenses.

Business Responsibility

- The Company's in-house sustainability efforts are in terms of sustainable production processes and practices across its operations.
- The Health Safety Environment and Sustainability Affairs (HSE/SA) function of the Company guides the strategic direction and delivers effective, efficient services that embed occupational health, safety, environment, security and corporate responsibility and sustainable business practices of the Company. Qualified and experienced HSE/ SA professionals at the business level anchor relevant HSE practices alongside programs that are anchored centrally at the corporate level and at the ABB Group level.
- To realize global leadership in Sustainability performance, the ABB Group has created a robust and comprehensive HSE/SA management system based on internationally recognized sustainability standards, principles and commitments including ISO 45001 and ISO 14001 called the ABB Way.
- The nine sustainability objectives against which performance is monitored and reported:
 1. Products and services for a better world
 2. Energy efficiency and climate change
 3. Safe and secure operations
 4. Integrity
 5. Human rights
 6. People and society
 7. Responsible sourcing
 8. Resource efficiency
 9. Right materials

Financials

Standalone Income Statement

Year ending December	CY16	CY17	CY18	CY19	CY20E	CY21E	CY22E
Net Revenues	86,422	60,937	66,901	73,151	59,466	75,135	83,349
<i>Growth (%)</i>	6.2	(29.5)	9.8	9.3	(18.7)	26.3	10.9
Material Expenses	56,132	41,030	45,137	48,611	39,398	50,164	55,072
Employee Expenses	7,503	5,187	5,295	5,796	6,331	6,843	7,496
Other Operating Expenses	15,842	10,575	11,892	13,432	12,779	12,838	14,488
EBIDTA	6,945	4,146	4,578	5,312	959	5,290	6,293
<i>EBIDTA (%)</i>	8.0	6.8	6.8	7.3	1.6	7.0	7.6
<i>EBIDTA Growth (%)</i>	(2.5)	(40.3)	10.4	16.0	(82.0)	451.9	19.0
Depreciation	1,510	1,012	928	904	1,084	1,195	1,343
EBIT	5,436	3,133	3,650	4,408	-125	4,095	4,950
Other Income	1,216	777	840	943	1,420	975	1,017
Interest	919	572	539	214	136	150	130
EO items	-	-	-	697	(568)	-	-
PBT	5,733	3,338	3,951	4,440	1,727	4,920	5,837
Tax	1,988	1,084	1,410	1,418	134	1,279	1,518
RPAT	3,745	2,255	2,542	3,022	1,592	3,641	4,319
EO items (net of tax)	-	-	-	697	(568)	-	-
Profits from Associates	-	-	-	-	-	-	-
APAT	3,745	2,255	2,542	3,719	1,024	3,641	4,319
<i>APAT Growth (%)</i>	24.9	(39.8)	12.7	46.3	(72.5)	255.4	18.6
EPS	18	10.6	12.0	17.6	4.8	17.2	20.4
<i>EPS Growth (%)</i>	24.9	(39.8)	12.7	46.3	(72.5)	255.4	18.6
<i>Profit from discontinued operations</i>	<i>0</i>	<i>1,945</i>	<i>2,567</i>	<i>2,054</i>	<i>2,156</i>	<i>2,221</i>	<i>2,388</i>
Profit for the year	3,745	4,200	5,109	5,773	3,181	5,862	6,707

Source: Company, HSIE Research

Standalone Balance Sheet

As at December	CY16	CY17	CY18	CY19	CY20E	CY21E	CY22E
SOURCES OF FUNDS							
Share Capital	424	424	424	424	424	424	424
Reserves	32,443	35,645	39,649	34,777	35,114	37,400	40,229
Total Shareholders Funds	32,867	36,069	40,073	35,201	35,537	37,823	40,652
Total Debt	6,000	6,042	21	71	0	0	0
Other Non Current Liabilities	560	465	358	485	485	485	485
Deferred Taxes	(1,304)	(1,173)	(1,150)	(1,103)	(1,103)	(1,103)	(1,103)
Misc. Items	-	-	-	-	1,880	1,880	1,880
TOTAL SOURCES OF FUNDS	38,124	41,403	39,302	34,654	36,800	39,086	41,915
APPLICATION OF FUNDS							
Net Block	12,549	12,187	8,931	7,417	9,778	10,248	10,420
CWIP	678	1,165	831	595	695	795	895
Investments	162	2	2	-	-	-	-
Other Non Current Assets	-	-	-	-	-	-	-
Total Non-current Assets	13,389	13,353	9,763	8,012	10,473	11,043	11,315
Inventories	9,403	11,536	9,279	8,617	8,095	10,308	11,316
Debtors	29,707	27,878	16,869	19,475	15,640	20,173	22,379
Cash & bank balances	11,892	17,621	14,752	15,977	14,565	14,833	15,995
Other Current Assets	11,617	17,320	10,935	19,598	12,056	13,012	14,044
Total Current Assets	62,619	74,354	51,834	63,668	50,357	58,326	63,734
Creditors	34,860	43,160	26,757	36,120	22,883	29,136	31,987
Other Current Liabilities & Provns	3,025	3,145	2,334	2,415	2,657	2,657	2,657
Total Current Liabilities	37,885	46,305	29,090	38,535	25,540	31,793	34,644
Net Current Assets	24,734	28,050	22,744	25,133	24,817	26,533	29,090
Net assets pertaining to discontinued operations/Assets held for sale	-	-	6,795	1,509	1,509	1,509	1,509
TOTAL APPLICATION OF FUNDS	38,124	41,403	39,302	34,654	36,799	39,085	41,914

Source: Company, HSIE Research

Standalone Cash Flow

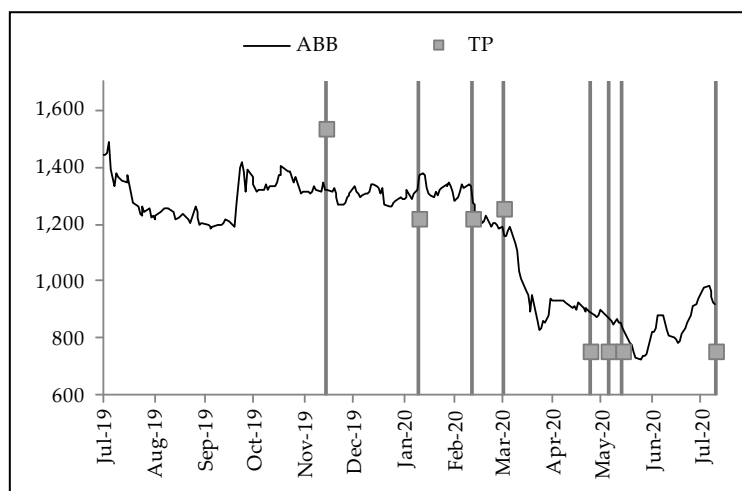
Year ending December	CY16	CY17	CY18	CY19	CY20E	CY21E	CY22E
PBT	5,761	6,218	7,942	4,440	1,727	4,920	5,837
Non-operating & EO items	(142)	(258)	(24)	(211)	(1,420)	(975)	(1,017)
Interest expenses	849	773	767	291	136	150	130
Depreciation	1,510	1,580	1,458	1,040	1,084	1,195	1,343
Working Capital Change	2,821	2,403	(1,641)	2,846	(1,096)	(1,448)	(1,395)
Tax paid	(2,172)	(2,799)	(2,248)	(1,738)	(134)	(1,279)	(1,518)
OPERATING CASH FLOW (a)	8,626	7,917	6,255	6,669	296	2,563	3,380
Capex	(1,040)	(1,847)	(2,360)	(1,215)	(3,545)	(1,765)	(1,615)
Free cash flow (FCF)	7,586	6,070	3,894	5,454	(3,249)	798	1,765
Investments	(5)	(2,462)	2,827	1	-	-	-
Non operating income	363	1,103	971	(2,693)	1,420	975	1,017
INVESTING CASH FLOW (b)	(681)	(3,205)	1,437	(3,907)	(2,125)	(790)	(598)
Share capital Issuance	-	-	-	-	-	-	-
Dividend payment	(944)	(1,020)	(1,138)	(1,176)	(1,256)	(1,355)	(1,490)
Debt Issuance	0	83	(6,000)	-	(71)	-	-
Interest expenses	(845)	(773)	(799)	(291)	(136)	(150)	(130)
FINANCING CASH FLOW (c)	(1,788)	(1,710)	(7,937)	(1,467)	(1,463)	(1,505)	(1,620)
NET CASH FLOW (a+b+c)	6,156	3,001	(245)	1,295	(3,292)	268	1,162
Opening Cash & Equivalents	5,736	11,892	17,621	14,752	15,977	14,565	14,833
Others - Margin & IPO deposits (cl. Bal)	-	2,728	-	-	1,880	-	-
Closing Cash & Equivalents	11,892	17,622	14,752	15,977	14,565	14,833	15,995

Key Ratios

	CY16	CY17	CY18	CY19E	CY20E	CY21E	CY22E
PROFITABILITY (%)							
GPM	35.0	32.7	32.5	33.5	33.7	33.2	33.9
EBITDA Margin	8.0	6.8	6.8	7.3	1.6	7.0	7.6
EBIT Margin	6.3	5.1	5.5	6.0	(0.2)	5.5	5.9
APAT Margin	4.3	3.7	3.8	5.1	1.7	4.8	5.2
RoE	11.9	6.5	6.7	9.9	2.9	9.9	11.0
Core RoCE	12.9	8.7	9.9	14.2	(0.6)	13.3	14.9
RoCE	11.6	6.5	7.0	10.3	3.2	9.7	10.7
EFFICIENCY							
Tax Rate (%)	34.7	32.5	35.7	31.9	7.8	26.0	26.0
Asset Turnover (x)	6.4	4.3	6.0	5.8	4.2	4.8	4.8
Inventory (days)	40	69	51	43	50	50	50
Debtors (days)	125	167	92	97	96	98	98
Payables (days)	147	259	146	180	140	142	140
Cash Conversion (days)	18	(22)	(3)	(40)	5	7	7
Other Current Assets (days)	49	104	60	98	74	63	62
Other Current Liab (days)	13	19	13	12	16	13	12
Net Working Capital Cycle (Days)	54	62	44	46	63	57	57
Debt/EBITDA (x)	0.9	1.5	0.0	0.0	0.0	0.0	0.0
Net D/E	(0.2)	(0.3)	(0.4)	(0.5)	(0.4)	(0.4)	(0.4)
Interest Coverage	5.9	5.5	6.8	20.6	-	-	-
PER SHARE DATA							
EPS (Rs/sh)	17.7	10.6	12.0	17.6	4.8	17.2	20.4
CEPS (Rs/sh)	24.8	15.4	16.4	21.8	9.9	22.8	26.7
DPS (Rs/sh)	4.5	4.8	5.4	5.5	5.9	6.4	7.0
BV (Rs/sh)	155	170	189	166	168	178	192
VALUATION							
P/E	51.8	86.0	76.3	52.1	189.3	53.3	44.9
P/BV	5.9	5.4	4.8	5.5	5.5	5.1	4.8
EV/EBITDA	27.1	44.0	39.1	33.5	187.1	33.8	28.3
OCF/EV (%)	4.6	4.3	3.5	3.7	0.2	1.4	1.9
FCF/EV (%)	4.0	3.3	2.2	3.1	(1.8)	0.4	1.0
FCFE/Market Cap (%)	3.5	2.8	(1.5)	2.7	(1.8)	0.3	0.8
Dividend Yield (%)	0.5	0.5	0.6	0.6	0.6	0.7	0.8

Source: Company, HSIE Research

RECOMMENDATION HISTORY



Date	CMP	Reco	Target
15-Nov-19	1,469	NEU	1,534
10-Jan-20	1,372	NEU	1,219
13-Feb-20	1,274	NEU	1,219
2-Mar-20	1,185	ADD	1,254
24-Apr-20	896	SELL	755
5-May-20	878	SELL	755
15-May-20	837	SELL	755
11-Jul-20	915	SELL	755

From 2nd March 2020, we have moved to new rating system

Rating Criteria

- BUY: >+15% return potential
- ADD: +5% to +15% return potential
- REDUCE: -10% to +5% return potential
- SELL: >10% Downside return potential

Disclosure:

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