MANAGEMENT DISCUSSION & ANALYSIS

Hindalco Industries Limited, the metals flagship company of the Aditya Birla Group, is the world's largest aluminium rolling and recycling company, and a major copper player. It is also one of Asia's largest producers of primary aluminium. In India, the Company's aluminium manufacturing units comprise the full value chain-from bauxite mining, alumina refining, coal mining, captive power generation and aluminium smelting to downstream value addition of aluminium rolling, extruding and foil making. Hindalco's copper facility in India comprises a world-class copper smelter, downstream facilities, a fertilizer plant and a captive jetty. The copper smelter is among the world's largest custom smelters at a single location.

Novelis Inc., Hindalco's wholly-owned subsidiary is the world's largest producer of aluminium beverage can stock and the largest recycler of used beverage cans (UBCs). Novelis provides innovative solutions to its customers in the beverage cans, automobile and speciality products segments. It operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia. Hindalco's global footprint spans 47 manufacturing units across 10 countries.

In FY 2019-20 the Company delivered a resilient performance in terms of operational stability and financial performance, despite macroeconomic challenges, tough business conditions and global uncertainties. Novelis continued to report its best-ever EBITDA and EBITDA per tonne with stable shipments. Primary aluminium registered its highest ever overall metal sales and Copper clocked its highest ever domestic copper rod sales. Hindalco continued to maintain its strong balance sheet in FY 2019-20, resulting in a consolidated Net Debt-to-EBITDA of 2.61 times at the end of the year.

KEY INITIATIVES DURING THE YEAR

Hindalco completed the acquisition of Aleris on 14th April 2020, and the integration process to drive synergies and unlock the long-term value has begun. The divestment procedures for automotive assets in Lewisport in the U.S. and Duffel in Europe is underway. The acquisition of Aleris provides Novelis further product diversification with the addition of high-end aerospace and expanded speciality capabilities. It insulates Hindalco-Novelis from global price volatility and sharpens focus on the downstream business. From being a largely commodity-driven Company, Hindalco has become the world's largest downstream player.

Novelis, remains committed to advancing all its organic projects, announced its 200Kt automotive finishing facility in Guthrie, Kentucky in the U.S, 100Kt of the auto finishing line in China, a rolling, casting and recycling capacity in Pinda, Brazil and the recycling facility in Greensboro in the U.S.

Novelis successfully issued US$1.6 billion bonds at 4.75% due in CY 2030 and extended debt maturity profile at attractive rates. These proceeds are used to repay existing US$1.15 billion, 6.25% Bonds, due in 2024 with a net interest savings of around US$ 17 million per annum.

Utkal's Alumina brownfield capacity expansion, by 500 Kt, is expected to be completed in Q4 of FY 2020-21. This will further strengthen the Company's integration and boost the availability of best-in-class alumina to its aluminium smelters in India.

Hindalco's focus on a sustainable business model with its downstream strategy of product expansion in India, will nearly double its existing downstream capacity in the next five to six years. This will enhance share of VAP to insulate Consolidated Hindalco from LME volatility further. Hindalco has made certain investments to enhance capacities in the extrusion press and capabilities in VAP products such as Circles and Hard Alloys along with investments in a new scrap furnace at the Hirakud FRP facility.

1. INDUSTRY ANALYSIS

1.1 Aluminium Segment and Industry Review

In CY 2019, global economic growth slowed down despite accommodative monetary and expansionary fiscal policies in developed and emerging markets. The growth was subdued as a result of rising trade barriers, uncertainty surrounding trade and geopolitics and region-specific structural factors. The prolonged uncertainty around the resolution of the trade war also dented investments across regions. Only the U.S. economy performed better than expected supported by personal consumption and government spending. Other prominent economies like China, Eurozone, and emerging

MANAGEMENT DISCUSSION & ANALYSIS

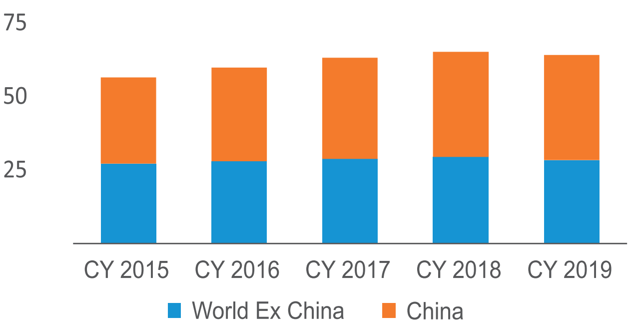
nations, including India, witnessed a moderation in economic activities. Chinese economic growth registered its weakest performance since 1992. The Eurozone felt the worst impact of the US-China trade war and uncertainties around Brexit, resulting in dismal economic growth.

The prolonged US-China trade war dampened global economic sentiments with most of the major economies experiencing a slowdown in economic growth. This in turn affected aluminium consumption. In 2019, primary aluminium consumption growth declined to 2% y-o-y from the growth of 3% y-o-y in 2018. The world, excluding China, reported aggregate consumption de-growth of around 4% in 2019, down from 2% in 2018, owing to weakening demand in North America, Japan, Italy, France. Among user industries, only packaging including foil stock recorded around 3% growth y-o-y in 2019 whereas consumption growth declined in sectors like Transportation, Construction, Consumer Durables and Machinery and Equipment sectors.

In CY 2019, China witnessed slowdown due to two issues: first, the trade war with the US and second, coping with moderation in the domestic economy. Consequently, due to a sharp decline in demand from the electrical, transport, and construction sectors, aggregate aluminium consumption de-growth was 1% in CY 2019 from around 2% growth in CY 2018.

Global aluminium production excluding China grew around 1% y-o-y in CY 2019 versus growth of around 2% y-o-y a year ago; production in China declined by 3% y-o-y due to production cuts, as compared to flattish growth in 2018. As a result, overall global production marginally degrew by 1% y-o-y in CY 2019, down from around 1% y-o-y growth in CY 2018. Given the sharper slowdown of global consumption by 2% as against a production slowdown of 1%, the deficit moderated to ~1 Mt. Consequently, global inventories reduced from ~12 Mt in the beginning of CY 2019 to ~11 Mt by the end of CY 2019.

Primary Consumption of Aluminium (Mt)



FY 2019-20: KEY HIGHLIGHTS

Achieved

Record Aluminium metal production at

1,314 Kt

Record Aluminium metal sales at

1,290 Kt

Alumina production at

2,735 Kt*

Aluminium value-added products (VAP) in India (excluding wire rods) production at

319 Kt

Record Copper rods production at

263 Kt

Overall shipments in Novelis of

3,273 Kt

Consolidated Revenue of

₹ 1,18,144 crore

Consolidated EBITDA of

₹ 15,536 crore

Consolidated PAT of

₹ 3,767 crore

Record Adjusted EBITDA in Novelis

US$ 1.472 billion

Record Yearly adjusted EBITDA/ton in Novelis

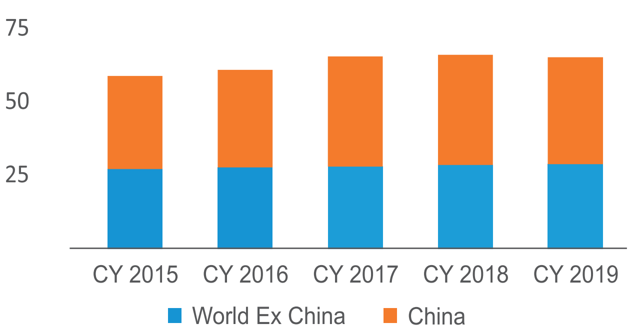
US$ 450

Recycled inputs in Novelis

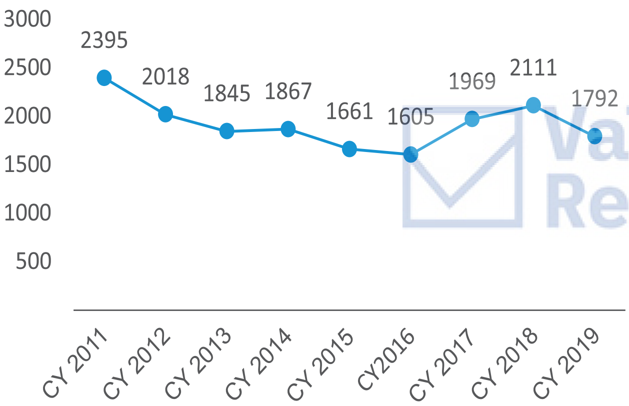
60%

**including Utkal, the wholly-owned subsidiary*

Primary Production of Aluminium (Mt)



Global Aluminium Prices ($/tonne)



In CY 2019, due to significant weakness in demand and the ongoing US-China trade war, global aluminium prices continued to plunge from $1,846/t in January 2019 to close at $1,770/t in December 2019. The average value of premiums at Main Japanese Port (MJP), European Rotterdam Ingot duty paid and US Midwest premium in CY 2019 was $99/t, $143/t and $18 cents/lb, versus $117/t, $165/t and $19 Cents/lb, respectively, in CY 2018.

In the domestic market, aluminium production declined by 2% in FY 2019-20 while domestic consumption is estimated to decline by around 6-7%. User industries like Transportation, Electrical and Industrial Machinery Equipment sector saw drop in consumption, while Packaging and Consumer Durables were the major demand drivers. Imports continued to be a concern for domestic players, which accounted for 58% of the market in FY 2019-20. Overall imports including scrap touched ~2.2 Mt in FY 2019-20 from ~2.3 Mt in FY 2018-19.

1.1.1 Outlook:

In CY 2020, the global macroeconomic environment is expected to remain highly volatile due to rising trade tensions between the US and China and the impact of COVID-19. The necessary protection measures imposed because of the pandemic are severely affecting economic activity and causing demand shocks and supply chain disruptions. Consequently, as per the World Bank June '2020 update, the global economy is expected to shrink by 5.2% in CY 2020 compared to 2.4% growth in CY 2019.

The adverse effects of COVID-19 prompted extraordinary stimulus measures from the government. According to a global consulting firm, government' have announced US$ 10 trillion just in the first two months of the pandemic which is thrice what was announced during the 2008-09 global financial crisis. The Central Banks of major economies are taking an accommodative policy stance to aid economic growth.

The global aluminium consumption is seen to be highly correlated with economic growth, and hence, global aluminium consumption growth in CY 2020 may decline by 7% to 8%. Almost all user industries except packaging, are likely to show a declining trend. The sharpest reduction in consumption may be in Transportation, Construction, Consumer Durables and Machinery & Equipment sectors. As China has reportedly recovered from the COVID-19 crisis, the fall in aluminium consumption is expected to be around 1 to 2% and in the world excluding China, this fall is expected to be in the range of 13% to 15% in CY 2020.

As smelting is a continuous process, global aluminium supply is likely to increase marginally by 1% to 63–64 Mt. Production in the world excluding China is expected to drop by around 1% to around 27–28 Mt. Primary aluminium supply in China is likely to grow marginally in the 36–37 Mt range, on the back of ramp-ups at state-owned enterprises.

In CY 2020, with an increase in supply by 1%, and a sharp slowdown in demand by 8% to 10%, the inventories are expected to increase by ~5 Mt by the end of 2020, leading to significant surplus markets. Consequently, the inventories are likely to increase to ~16 Mt by the end of 2020 up from ~11 Mt at the end of 2019.

India announced a stimulus of ~₹ 20 lakh crore which is approximately 10% of its GDP as against 1.2% of its GDP at the time of the global financial crisis in 2008-09. As of end-May 2020, the policy repo rate is at 4%, which is even lower than the 2008-09 financial crisis. Going forward, this is likely to support the overall economic revival. However, in the short term, due to lockdown and

MANAGEMENT DISCUSSION & ANALYSIS

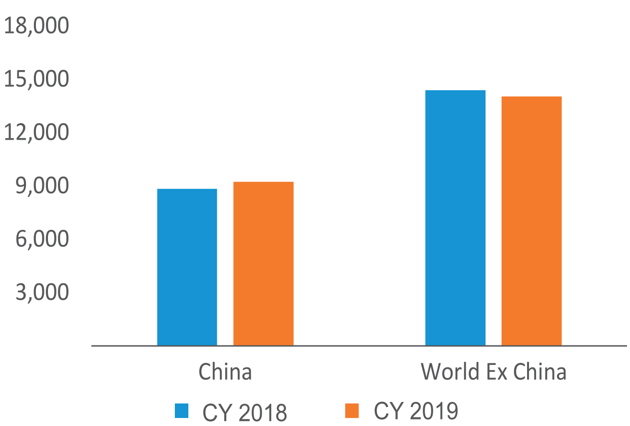
recovery from COVID-19, domestic demand is likely to decline by ~20-25% at the closing of FY 2020-21, due to slowdown in Transportation, Building & Construction, Industrial Equipment, and Consumer Durables. The only green shoot is a marginal growth in the packaging and pharma sectors. Imports of aluminium products, including scrap, continue to remain a major concern for the domestic aluminium producers. Over the last few years, the domestic rolled products industry has been witnessing an increase in dumping of imports especially from China, at unfair prices leading to the pricing pressure. Hence, the Company is in the process of approaching the Government for remedial trade measures on imports of rolled products. In light of the existing business environment, pricing pressure due to imports in rolled products is expected in FY 2020-21 as well, unless some proactive measures are taken by the Government to support the Aluminium industry in India.

1.2 Copper Segment and Industry Review

Global refined copper consumption saw a dip of 0.7% in CY 2019 as compared to the healthy growth of 2.9% in CY 2018. Global copper market was impacted by the various trade-related disputes, slowing Chinese economy that constitutes 50% of global consumption and strengthening U.S. dollar in CY 2019. However, China saw a growth of 1%, world excluding China saw a drop in copper consumption by 2.3% in CY 2019. This drop in copper consumption was driven by weak manufacturing activities in Europe (majorly Germany).

All these challenges clubbed with COVID-19, led to a sudden dip in global copper consumption by 17% in Q1 CY 2020 as compared to Q4 CY 2019. China alone saw a massive dent in refined copper consumption by over 33% in Q1 CY 2020 leading to a crash in copper prices. Copper LME that was just shy of the US$ 6,000 level at the end of December 2019 went down to US$ 4,800 by the end of March 2020 after touching a peak of US$ 6,300 in mid-January 2020.

Refined Copper Production (Kt)

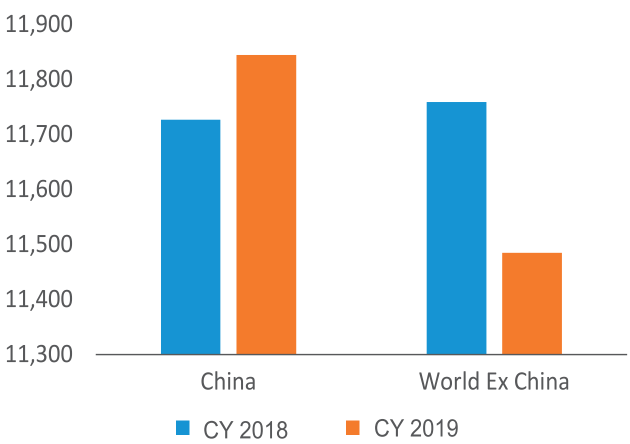


On the raw material side, copper mines saw a slight de-growth of 0.3% in Copper concentrate production globally in CY 2019 compared to previous year. This was on account of multiple issues faced by the mining industry including local community issues in some South American countries, and a drop in copper grade in some large global mines etc.

The tight concentrate market has impacted benchmark Tc/Rc for CY 2020 with benchmark dropping by 23% from 20.7 US cents/lb during CY 2019 to 15.9 US cents/lb. As far as spot Tc/Rc is concerned, drop in refined copper output at China during Q1 CY2020 by around 6% due to COVID-19 led to a surplus in the concentrate market as the rest of the world had not been impacted to a great extent at that time. This caused a temporary rise in spot Tc/Rc from around 11.5 US Cents/lb in Q4 CY2019 to around 15.0 US Cents/lb in Q1 CY2020.

In the domestic market, Copper demand saw a growth of 2.5% in FY 2020 compared to 13.5% in FY 2019. Sluggish demand in FY 20 can be attributed to poor demand from the Transportation and Power sectors. With new tariffs imposed on copper imports from the ASEAN region from January 2020, imports recorded a growth of 16%, much lower as compared to the growth of 30% a year back in FY 2019. The overall market share of imports in the domestic market increased from 40% in FY 2019 to 45% in FY 2020.

Refined Copper Consumption (Kt)



1.2.1 Outlook

Uncertainty related to COVID-19 and the other macroeconomic environments across the globe is going to impact the copper consumption in CY2020. However, at the same time, various stimulus declared by different countries is expected to provide some support to the overall demand. Global demand for refined Copper is likely to be around 22 Mt in CY2020, down by 5.5% compared to last year. China is expected to de-grow by 5%.

The world exluding China is expected to see a dip of 6% in CY2020 led by Europe, which is expected to see a degrowth for the second consecutive year. In CY2019, European industrial production shrunk amid slowed manufacturing activities and troubled automotive output. The feeble signs of recovery visible in early CY2020 has been blown away by the Covid crisis. European copper consumption is expected to see a drop of 8% in CY2020 vs a drop of 6.9% in CY2019.

Recovery in copper consumption in China and world excluding China to CY2019 level is expected by CY2022.

As far as the mines output is concerned, copper concentrate production is expected to drop by ~4-5% in CY2020. The COVID-19 pandemic has impacted the Southern Hemisphere in a big way, and many large mines in Peru, Panama, etc. have already declared force majeure. This will tighten the concentrate market which is likely to be in a deficit of around 400 Kt in CY2020 compared to a deficit of around 170 Kt in CY2019. The peak of this deficit is expected in Q2 CY2020, which is expected to then ease out during the second half of the CY2020. Accordingly, spot Tc/Rc is expected to hit bottom in Q2 CY2020 and then improve as the concentrate position eases out as the year progresses to its end.

For India this financial year, industrial output will be restricted by the current countrywide COVID-19 lockdowns. Migrant labour shortages and transport disruptions have already impacted both metals demand and supply. Industries are facing bottlenecks at different parts along their value chain and will take some time for these to clear and industrial activities to start at pre-COVID levels. The recent economic stimulus declared by the Indian Government will provide some support towards improving the copper consumption in India across sectors.

1.3 Novelis – Industry Review & Business overview

Economic growth, material substitution, and sustainability, including awareness around the harm to environment from polyethylene terephthalate (PET) plastics, continue to drive increasing global demand for aluminium and rolled products. With the exception of China, where can sheet overcapacity and strong competition remains, favourable market conditions and increasing customer preference for sustainable packaging options is driving higher demand for infinitely recyclable aluminium beverage cans and bottles. At the end of FY 2019, we began expanding rolling, casting and recycling capability in Pindamonhangaba, Brazil to support this demand.

Meanwhile, the demand for aluminium in the automotive industry continues to grow, and this has driven the investments made by the company in automotive sheet finishing capacity in North America, Europe and Asia in recent years. This demand in aluminium in the automotive industry is also driving additional investments made by Novelis in Guthrie, Kentucky (U.S.) and Changzhou, China. This demand has been primarily driven by the benefits that result from using lightweight aluminium in vehicle structures and components, as companies respond to stricter Government emissions and fuel economy regulations, while maintaining or improving vehicle safety and performance This has resulted in increased competition with high-strength steel.

The worldwide spread of COVID-19 has caused travel and business disruption and economic volatility. Novelis is closely monitoring the changing landscape with respect to COVID-19 and taking actions to manage its business and support its customers while focusing on the health and safety of all its employees.

On April 14, 2020, Novelis completed the acquisition of Aleris and has begun integration of its operations to drive synergies and long-term value. The divestment procedures for automotive assets at Lewisport in the U.S. and Duffel in Europe are underway. This acquisition will provide further product diversification with the addition of high-end aerospace and and expansion of its specialty capabilities in the U.S, Europe and Asia.

For a region-wise detailed business overview, please refer to the 10K filed by Novelis Inc. dated May 7th, 2020 for the year ended March 31, 2020.

1.3.2 Outlook

The global demand for flat rolled products in the near-term is likely to remain modest in cyclical end markets resulting from the current pandemic situation. In the current environment and post-COVID, industries like Beverages, Food Packaging, Pharmaceuticals will tend to benefit, leading to a higher demand for FRP in these segments.

The beverage can sheet market has historically been a recession-resistant product and is expected to remain resilient in the current COVID environment, particularly in North America and Europe. With the rising preference for sustainable beverage packaging, aluminium will continue to drive demand for beverage can sheet in the coming years.

Currently, the global automotive industry has seen adverse effects due to COVID-19. Aluminium FRP demand for automotive body sheets, driven by light-weighting trends in the Transportation sector, premium vehicles and Electric Vehicles continues to see strong traction with some positive signs of revival with the growing demand for automotive, majorly in the U.S., Europe and China. It is still unclear as to how much the COVID-19 will the impact overall near-term automotive demand.

In the Aerospace segment, reduction in production is seen as consumer travel is expected to drive lower demand in the next calendar year. In the longer-term, FRP growth in the Aerospace segment, remains intact with high order backlog from all aircraft manufacturers across the globe.

MANAGEMENT DISCUSSION & ANALYSIS

2. BUSINESS SEGMENT REVIEW

2.1 Hindalco – SWOT Analysis

INDIA ALUMINIUM

Strengths

- Integrated business model generating healthy cash flows
- Dominant player in India across upstream and downstream
- Utkal - among the world's most economical and efficient Alumina producer; capacity expansion of 500 Kt in progress and the Utkal capacity to reach 2.0 Mt
- Increased focused on Value Added Products (VAP) to be more LME-delinked

Weakness

- Commodity product with smaller share of VAP currently
- Upstream Business linked to Global Aluminium Price volatility

Opportunities

- Immense headroom for growing market in India; Aluminium consumption in India at 1/12th of global average
- Rising Aluminium penetration in Building & Construction, Automotive, Packaging, and Transportation bodes well for growing VAP demand
- Substitution opportunity versus steel, uPVC, wood, among others.

Threats

- Global Aluminium Prices, Forex and raw material price volatility
- Competition from China
- Threat of rising imports of scrap and other VAP to India from the Free Trade Agreement (FTA) countries
- Domestic availability/shortage of coal and bauxite

NOVELIS

Strengths

- Global presence - across nine countries, enabling global play with marquee customers
- Market leader in Can and Automotive FRP products
- Entry in the high-end aerospace segment providing further product diversification.
- ~60% share of recycling in Novelis portfolio - cost competitiveness
- Acquisition of Aleris to provide further product diversification and drive synergies.

Weakness

- Lack of access to Shanghai Future Exchange (SHFE) metal in China

Opportunities

- Growing penetration of aluminium cans for beverage and food packaging in emerging markets
- Growing automotive market is driven by EVs, energy efficiency and light-weighting focus across the globe
- Entry in the Aerospace, Defence and High-end specialities segments with the acquisition of Aleris

Threats

- Cost Competitiveness in China
- Price erosion on account of growing competition
- Impact of COVID-19 on automotive industry

Strengths

- A balanced portfolio of revenue streams to tide through volatile market
- Secured concentrate supply via long term contracts with miners
- Increased focused on VAP in Copper

Weakness

- Import dependence for Copper concentrate supplies

COPPER

Opportunities

- Immense headroom for growth due to lower consumption vs global average

Threats

- Mine disruptions
- Duties & FTAs – trade politics

2.2 Operational Performance & Financial Review

Financial Table: Hindalco Standalone & Consolidated

(₹ Crore)

Description	Standalone		Consolidated	
	FY 2019-20	FY 2018-19	FY 2019-20	FY 2018-19
Revenue from Operations	**40,242**	**45,749**	**1,18,144**	**1,30,542**
Earning Before Interest, Tax and Depreciation (EBITDA)				
Novelis*			10,435	9,565
Aluminium			3,729	5,096
Copper (including DHIL)			1,276	1,683
Other Segments			(16)	(76)
Unallocable Income/ (Expense) - (Net) & GAAP Adj.			112	359
Total EBITDA	**4,403**	**5,186**	**15,536**	**16,627**
Depreciation and amortization (including net impairment loss/(reversal) of non-current assets)	1,708	1,693	5,135	4,766
Finance Cost	1,679	1,683	4,197	3,778
Earning before Exceptional Items, Tax & Share in Profit/(Loss) in Equity accounted Investments	**1,016**	**1,810**	**6,204**	**8,083**
Share in Profit/(Loss) in Equity accounted Investments	-	-	4	-
Earning before Exceptional Items and Tax	**1,016**	**1,810**	**6,208**	**8,083**
Exceptional Income/ (Expenses) (Net)	(64)	-	(284)	-
Profit Before Tax (After Exceptiona Items)	**952**	**1,810**	**5,924**	**8,083**
Tax Expense	332	605	2,157	2,588
Profit/ (Loss) After Tax	**620**	**1,205**	**3,767**	**5,495**

*As per US GAAP

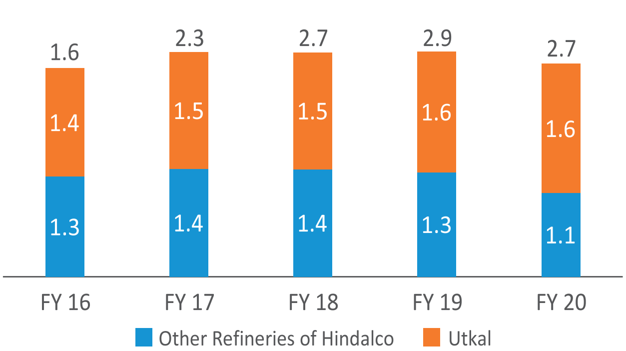
Hindalco Aluminium Business Review

2.2.1 Operational Overview – Aluminium

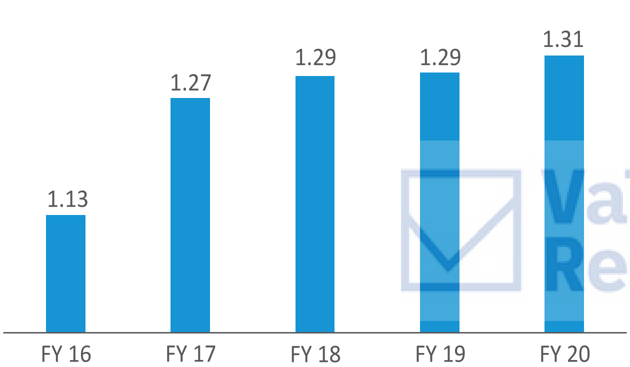
The Company achieved record operational performance in its aluminium business in FY 2019-20, despite the challenging business environment. This was supported by stable operations at all its manufacturing units in India with yet another record production of aluminium at 1.314 Mt. Alumina production was at 2.735 Mt Overall metal sales in all forms were at a record high of 1.290 Mt versus 1.274 Mt in FY 2018-19.Utkal Alumina also recorded its best-ever production and continues to be the most economical and efficient alumina producer globally, running at maximum capacity to produce 1.6 Mt of world-class alumina and providing strong support to most of Hindalco's India smelting facilities, leading to better cost optimization and quality input (Alumina). Production of VAP excluding wire rods was flat YoY, at 319 Kt in FY 2019-20.

MANAGEMENT DISCUSSION & ANALYSIS

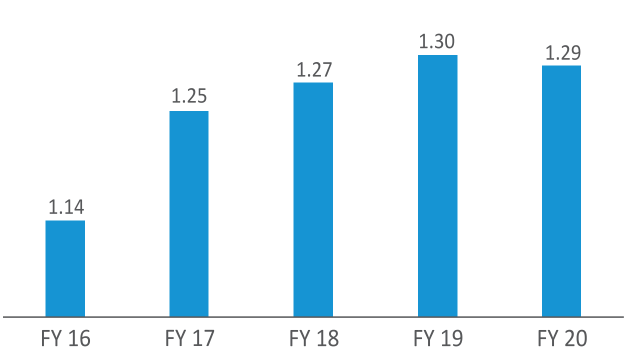
Alumina Production (Hydrate as Alumina) (Mt)



Aluminium Metal Production (Mt)



Aluminium Metal Sales in All Forms* (Mt)



*Including wire rods and other value added products.

On the coal side, in FY 2019-20, the total quantity secured through coal linkages stands at 12.2 Mt, translating to about 75% of annual coal requirements of Hindalco. Overall, 98% of annual coal requirements is secured through long-term linkages and captive mines. The Company has three captive mines- Gare Palma IV/4, Gare Palma IV/5 and Kathautia. The captive mine at Dumri is in the process of obtaining necessary statutory clearances and is expected to be operational in FY 2020-21.

2.2.2 Financial Overview

Aluminium

Revenue for Hindalco's aluminium business was ₹21,749* crore in FY 2019-20, from ₹23,775* crore in FY 2018-19, down 9%. EBITDA was at ₹3,729 crore versus ₹5,096 crore a year earlier, lower by 27% due to lower realization partially offset by lower input costs and better efficiencies. The EBITDA margins were at 17.1% in FY 2019-20, one of the best in the industry.

*(*The above numbers are without elimination of Inter-segment revenue)*

(₹ Crore)

Description	FY 2019-20	FY 2018-19	% Change
Revenue	21,749	23,775	-9%
EBITDA	3,729	5,096	-27%

Note: In the consolidated financial statements, within the aluminium segment, the significant entities are Hindalco and Utkal Alumina International Ltd. Since Utkal Alumina is a wholly-owned subsidiary of Hindalco and supplies a substantial quantity of its production to Hindalco, we have analyzed the combined performance of Hindalco's aluminium business along with Utkal Alumina.

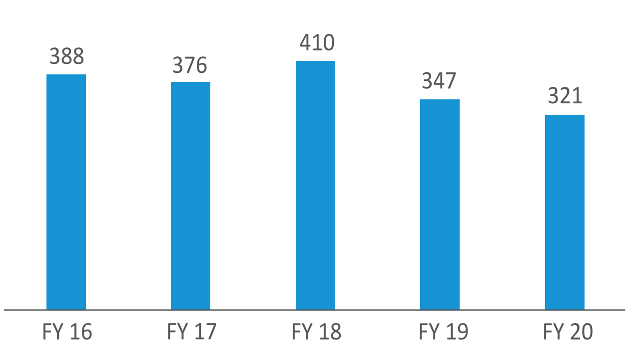
2.3 Copper Business Review

2.3.1 Operational Overview

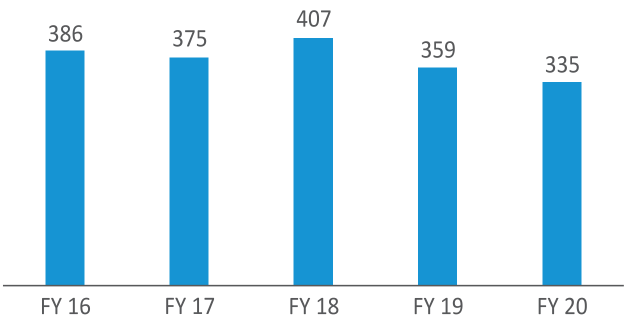
The copper business delivered a stable performance in FY 2019-20 in terms of sales and production despite challenging market conditions and production disruptions due to planned maintenance and related issues. Cathode production fell 7% from FY 2018-19 on account of plant disruptions in the last ten days of March 2020 due to the lockdown. Copper rod production was the highest ever at 263 Kt, up 7% in FY 2019-20. Production of Di-Ammonium Phosphate (DAP) was 230 Kt from 303 Kt due to some operational issues in the early part of the FY 2019-20.

Total Copper Metal Sales was at 335 Kt in FY 2019-20 down by 7% compared to the previous year due to lower production. The sales of Copper VAP (Copper Rods) were up by 6% at 257 Kt in FY 2019-20. The share of VAP (CC Rods) to Total metal sales has reached 77% in FY 2019-20, from 68% in the previous year.

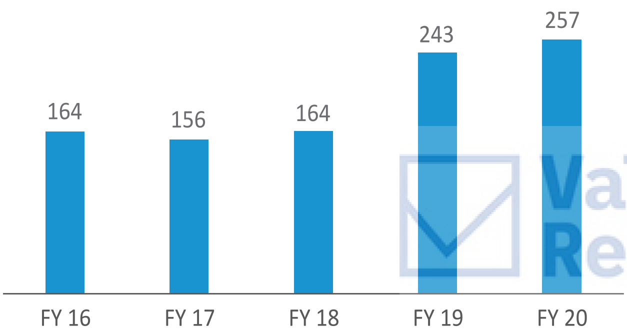
Copper Cathode Production (Kt)



Copper Metal Sales in All Forms (Kt)



Copper VAP - CC Rod Sales (Kt)



2.3.2 Financial Overview

Copper Business (including DHIL) revenue for FY 2019-20 was at ₹18,533* crore (vs. ₹ 22,198* crore in FY 2018-19), due to lower realizations and volumes. EBITDA fell 24% at ₹ 1,276 crore (vs. ₹ 1,683 crore in FY 2018-19) on account of lower volumes and by-product realizations in FY 2019-20 during the year.

**The above numbers are without elimination of Inter-segment revenue.*

(₹ Crore)

Description	FY 2019-20	FY 2018-19	% Change
Revenue	18,533	22,198	-17%
EBITDA	1,276	1,683	-24%

2.4 Novelis Business Review

2.4.1 Operational Overview

Novelis Inc. is the leading producer of flat-rolled aluminium products and the world's largest recycler of aluminium. Driven by its purpose of shaping a sustainable world together, Novelis works alongside its customers to provide innovative solutions in the beverage can, automotive, and speciality markets (which includes foil packaging, certain transportation products, architectural, industrial, and consumer durables). The Aleris acquisition has given Novelis entry into the aerospace segment. Novelis operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe, and Asia, and leverages its global manufacturing and recycling footprint to consistently deliver high-quality products around the world.

Novelis reported yet another year of record performance with its best-ever adjusted EBITDA and EBITDA per ton in FY 2019-20. The performance was mainly driven by its portfolio optimization, better cost efficiencies, favourable product mix, innovations, customer centricity and favourable demand for lightweight, sustainable aluminium solutions across end-markets.

Novelis has developed innovative products and processes to drive lightweight aluminium adoption across end-markets. It developed the first aluminium sheet battery enclosure to address the needs of customers in the fast-rising electric vehicle and battery markets. It is supplying Toyota with premium aluminium automotive body sheet for the all-new 2019 Toyota RAV4 and help RAV4 achieve weight savings. Novelis leveraged its extensive recycling footprint and the favourable market conditions to maintain the recycled content at 60% in FY 2019-20.

Total shipments were flat to 3.273 Mt in FY 2019-20. Share of beverage can sheet shipments increased from 63% in FY 2018-19 to 66% in FY 2019-20, and automotive body sheet shipments were at 19% in FY 2019-20, despite challenges in some regions, primarily Europe and China, and in the world market due to the pandemic lock down.

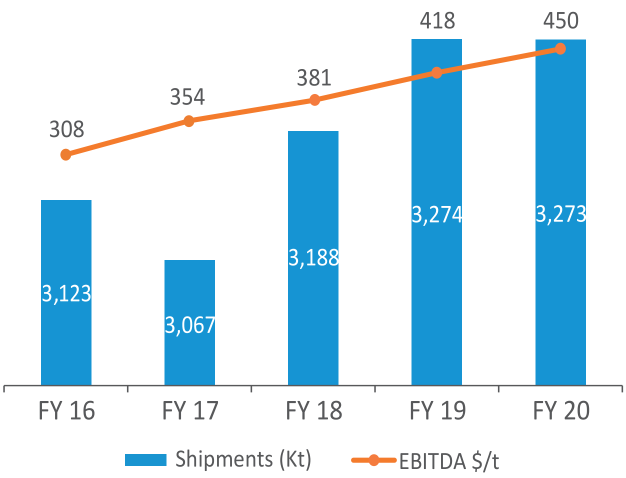
Novelis operates in four key geographies: North America, Europe, Asia and South America. In North America, in FY 2019-20, total shipments were 1,111 Kt. Novelis announced plans to set up a 200 Kt automotive finishing facility in Guthrie, Kentucky in the US, to cater to the growing automotive demand in this region. This facility is expected to be operational in FY 2020-21.

In Europe, the Company shipped 892 Kt across product categories in FY 2019-20. In Asia, Novelis shipped 711 Kt of rolled products versus 710 Kt in FY 2018-19. Its automotive finishing line expansion project of 100 Kt is progressing well and is expected to be operational in FY 2020-21. In South America, Novelis shipped 559 Kt in FY 2019-20, up from 526 Kt in the previous year.

In FY 2019-20, Novelis reported a record overall adjusted EBITDA/tonne of $450, up from $418/tonne, reflecting a strong and consistent performance year after year.

MANAGEMENT DISCUSSION & ANALYSIS

Shipments (Kt) and EBITDA Per Tonne ($)



With Novelis' thrust on sustainability and recycled aluminium, the share of recycled inputs was at 60% in FY 2019-20. The Company has invested significantly in recycling initiatives and developed high-tech recycling capabilities over the years. Its new rolling, casting and recycling expansion in Brazil is expected to be commissioned in FY 2021-22.

2.4.2 Financial Overview

Novelis' net sales in FY 2019-20 were at $ 11.2 billion, down 9% mainly driven by lower average global aluminium prices and local market premiums. Adjusted EBITDA stood at a record high of $ 1.472 billion, up 8%, on the back of portfolio optimization, favourable metal prices, better cost efficiencies and favourable foreign exchange, partially offset by less favourable recycling benefits due to lower aluminium prices. Novelis reported free cash flow of $ 384 million driven by stronger adjusted EBITDA and lower interest costs. Net income (without Exceptional Items) stands at $ 590 million in FY 2019-20 vs. $ 468 million in FY 2018-19 up by 26% year on year.

($ in Million)

Description	FY 2019-20	FY 2018-19	% Change
Net Sales	11,217	12,326	-9%
Adjusted EBITDA	1,472	1,368	8%
Net Income/ (loss) excluding Special Items*	590	468	26%

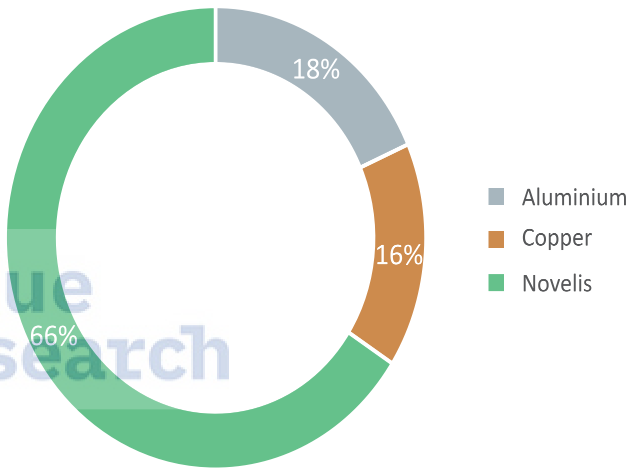
**Tax-effected special items may include restructuring & impairment, metal price lag, gain/loss on assets held for sale, loss on extinguishment of debt, loss/gain on sale of business*

3. CONSOLIDATED FINANCIAL STATEMENTS

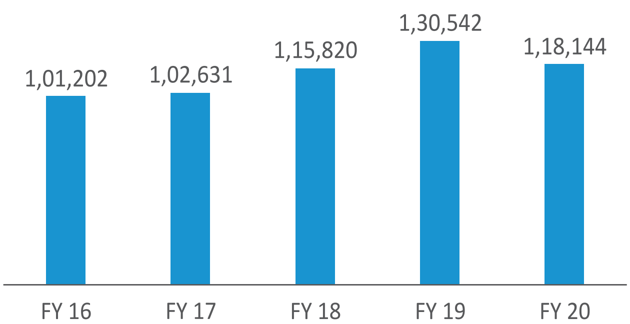
3.1 Revenue

Hindalco's consolidated revenue was at ₹1,18,144 crore in FY 2019-20 compared to ₹1,30,542 crore in FY 2018-19, down by 9% due to lower global aluminium prices and local market premiums.

Revenue split by business for FY 2019-20:



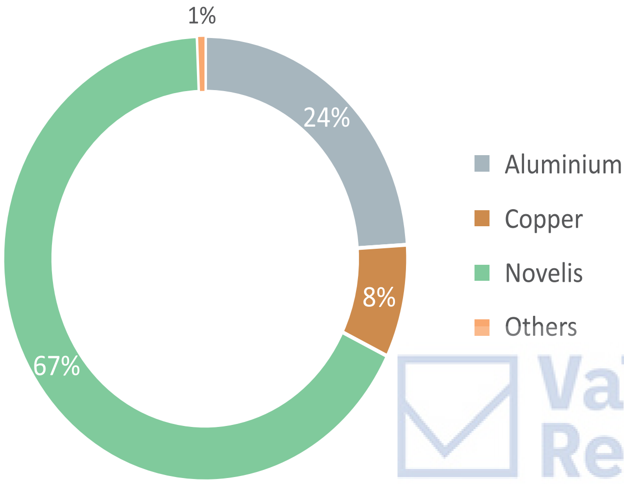
Revenue (₹ Crore)



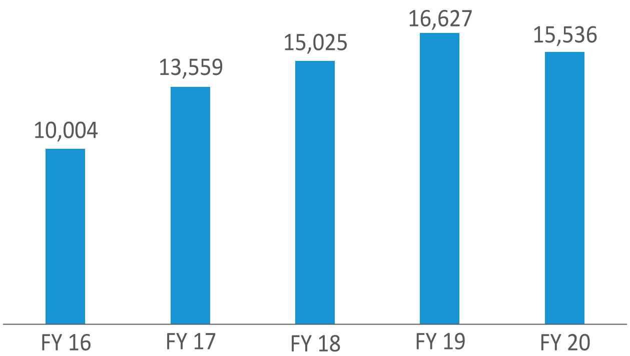
3.2 EBITDA

Consolidated EBITDA FY 2019-20 declined by 7% to ₹15,536 crore from ₹16,627 crore in the previous year. This was due to lower EBITDA in aluminium and copper businesses in India,offset by a best-ever performance by Novelis in FY 2019-20. The EBITDA margin in FY 2019-20 was better at 13.2% compared to 12.7% in FY 2018-19.

EBITDA : Split by Business in FY 2019-20



EBITDA (₹ Crore)



3.3 Finance Cost

Finance Cost increased by 11% at ₹4,197 crore in FY 2019-20 from ₹3,778 crore in FY 2018-19 due to the impact of refinancing cost of ₹568 crore in Novelis in FY 2019-20. Novelis successfully refinanced its 6.25%, $1.15 billion bonds due in 2024 with an attractive 4.75%, $1.6 billion bonds due in 2030, with a net interest savings of $17 million per annum.

3.4 Depreciation and amortization (including net impairment loss/(reversal) of non-current assets)

Depreciation and amortization (including net impairment loss/(reversal) of non-current assets) increased to ₹5,135 crore in FY 2019-20 from ₹4,766 crore in FY 2018-19 mainly on account of progressive capitalization and adoption of IndAS 116 "Leases" effective from April 1, 2019 and exchange impact.

3.5 Exceptional Income/(Expense)

The total exceptional expense of ₹284 crore in FY 2019-20 was majorly on account of the closure of one of Novelis' foil plants in Ludenscheid, Germany, which allowed driving more inter-plant efficiencies in the region and optimizing its overall product portfolio towards high-margin, recycled content friendly products. This plant ceased all its production during the fourth quarter of FY 2019-20. The exceptional expense also includes the restoration of Red Mud pond and other related expenses at the Muri Alumina refinery.

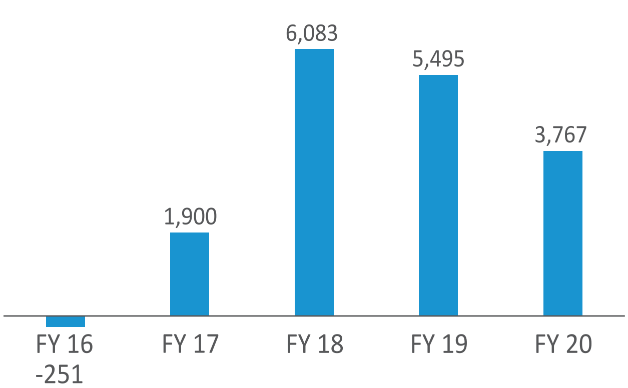
3.6 Taxes

Provision for tax was at ₹2,157 crore in FY 2019-20 against ₹2,588 crore in FY 2018-19. This decrease in taxes was due to lower profitability of the company in FY 2019-20.

3.7 Profit/(Loss) after tax

Profit After Tax (PAT) in FY 2019-20 was at ₹3,767 crore compared to ₹5,495 crore a year ago. FY 2019-20 includes an exceptional expense (before tax) of ₹284 crore mainly on account of the closure of one of Novelis' foil plant facilities in Ludenscheid, Germany and the impact of refinancing cost at Novelis of ₹568 crore in FY 2019-20. The net profit margin in FY 2019-20 stands at 3.2% versus 4.2% in FY 2018-19.

Profit After Tax (₹ Crore)



3.8 Consolidated Net Debt to EBITDA

The consolidated balance sheet continued to remain strong with the Net Debt to EBITDA at 2.61 times at the end of March 2020 versus 2.48 times at the end of March 2019.

3.9 Key Financial Ratios (Consolidated)

(i) Debtors Turnover (Days)

The Consolidated Debtors Turnover Days on March 31, 2020 stands at 32 days versus 30 days at the end of March 31, 2019. This shows consistency in managing its credit with customers and this also reflects the Company's strong

MANAGEMENT DISCUSSION & ANALYSIS

financial position with respect to most of its customers. The Debtor Turnover (days) is calculated as Average Debtors / Total Consolidated Sales multiplied by 365 days.

(ii) Inventory Turnover (Days)

The Consolidated Inventory Turnover Days on March 31, 2020 was little higher maintained at 75 days versus 67 days at the end of March 31st, 2019. This shows how the Company managed its inventory levels during the year. This was higher primarily due to some inventories in March on account of the lockdown. The Inventory (days) is calculated as Average Inventory / Cost of Goods Sold (Cost of Sales + Depreciation) multiplied by 365 days.

(iii) Interest Coverage Ratio:

The Consolidated Net Interest Coverage Ratio as on March 31, 2020 stands at 3.70 times versus. 4.40 times at the end of March 31, 2019. This is a bit low over the previous year because of lower earnings (EBIT) and higher interest cost due to the impact of refinancing costs in Novelis. This ratio reflects the Company's ability and strength to meet its interest obligations.

(iv) Current Ratio

The Consolidated Current Ratio as on March 31, 2020 stands at 1.78 times versus 1.58 times at the end of March 31, 2019. This ratio reflects the Company's strong liquidity or solvency.

(v) Debt to Equity Ratio

The Consolidated Debt to Equity Ratio as on March 31, 2020 stands well above 1.0x at 1.15 times versus. 0.91 times as on March 31, 2019. This reflects the Company's strong balance sheet and ability to meet its current short-term obligations.

(vi) Return in Net Worth (RONW)

The Consolidated Return on Net Worth as on March 31, 2020 stands at 6.46% compared to 9.56% as at March 31, 2019. This was lower compared to the previous year due to the lower profits and impact of the refinancing cost in Novelis. Adjusting for the post-tax impact of ₹568 crore in FY 2019-20 this will be 7.08%.

(vii) Operating Margins

The Consolidated Operating margins in FY20 stands at 12.15% versus 11.87% in FY19 reflecting higher operating profit in FY20 compared to the previous year. (Operating Margin = Operating Profit/Net Sales)

3.10 Consolidated Cashflow:

Cash from operations for Hindalco Consolidated stands at ₹12,665 crore in FY 2019-20 versus ₹11,977 crore in FY 2018-19.

The table below shows the comparative movement of Cash flows:

(₹ in Crore)

Particulars		Consolidated	
		Financial Year ended	
		31.03.2020	31.03.2019
A.	**CASH FLOW FROM OPERATING ACTIVITIES**		
	Operating Cash flow before working capital changes	13,945	15,548
	Changes in working capital	(1,178)	(1,683)
	Cash generated from operations before Tax	**12,767**	**13,865**
	(Payment)/Refund of Direct Taxes	(102)	(1,888)
	Net Cash generated/ (used) -Operating Activities (a)	**12,665**	**11,977**
B.	**CASH FLOW FROM INVESTMENT ACTIVITIES**		
	Net Capital Expenditure	(6,732)	(5,968)
	Sale proceeds from Slump Sale	25	-
	(Purchase) / Sale of treasury instrument (Net)	(1,578)	(308)
	Investment in equity accounted investees	(3)	(6)
	Loans & Deposits (given) / received back (Net)	266	94
	Interest and dividends received	331	540
	Investment in Equity Shares at FVTOCI	(653)	-
	Others	43	-
	Net Cash generated/ (Used) - Investing Activities (b)	**(8,301)**	**(5,648)**
C.	**CASH FLOW FROM FINANCING ACTIVITIES**		
	Equity Raised / Debentures Redeemed	4	3
	Treasury shares acquired by ESOP Trust	(7)	(124)
	Net Debt inflows	10,949	(1,441)
	Interest & Finance Charges paid	(4,016)	(3,581)
	Dividend Paid (including Dividend Distribution Tax)	(320)	(323)
	Net Cash generated/ (Used) - Financing Activities (c)	**6,610**	**(5,466)**
	Net Increase/(decrease) in Cash and Cash Equivalents (a) +(b) + (c)	**10,974**	**863**

4. BUSINESS OUTLOOK

Hindalco continued to deliver strong and resilient performance in FY 2019-20, despite a challenging business environment and significant market uncertainties. Currently, around 77% of Hindalco's consolidated EBITDA is LME-delinked, an affirmation of its diversified, value-added portfolio.

The Company's relentless focus is on better efficiencies and cost competitiveness, as all its smelters continue to be in the first quartile of the global cost curve. The capacity expansion project at Utkal Alumina refinery will further help in reducing the overall integrated cost of production going forward. The company is also focused on cash conservation and maintaining adequate liquidity to continue to deliver sustained performance despite the current tough environment due to COVID-19. The Company's long-term strategic investments in Novelis and the India downstream expansion will enhance its capabilities. In addition, the acquisition of Aleris will provide further product diversification in Novelis to strengthen the Company's long-term sustainable business model.

The Copper Continuous Cast Rod mill (CCR#3) is ramping up well, taking rod capacity to ~82% of cathode production, from 40% in the earlier years. This VAP capacity will help the Company drive a larger market share and meet the growing demand for Copper in the domestic market.

Hindalco will continue to keep a close watch on input prices, including coal, which affects the overall cost of production. The Company endeavours to mitigate this impact by utilizing its resources well, with better efficiencies across all products and plant locations, including Novelis. The Company is also focusing on further enriching its product mix and is evaluating investments in aluminium downstream facilities towards newer products and its existing product lines to cater to this demand. However, concerns over low-cost imports in aluminium and copper continue to hurt the domestic aluminium and copper industry.

The recent acquisition of Aleris by Novelis will cater to newer customers and products in Aerospace and high-end speciality, Truck & Trailer businesses, which will enhance its existing product portfolio. This will help Novelis to solidify further its leadership position as the global aluminium value-added player.

Novelis' ongoing organic expansion projects in the US, Brazil and China will drive overall business to the next level with its product diversity and market leadership while maintaining its balanced and disciplined approach towards decision-making in each of its product categories.

5. PRICE RISK MANAGEMENT

Hindalco's financial performance was significantly impacted by fluctuations in prices of aluminium, exchange rates and interest rates. The Company takes a structured approach to the identification, quantification and hedging of such risks by using derivatives in commodity and currency, which is driven by a comprehensive risk management policy of the Company.

6. SUSTAINABILITY

With a focus on creating value, exceeding expectations and operating responsibly, we continue our journey towards a resilient, responsible and reliable future. To continue being a leading non-ferrous metals and mining company, we ensure that our operations are run in an environmentally conscious and socially responsible manner.

The amalgamation of sustainability with our business strategy has helped us in the effective management of our business in the turbulent business environment and challenging situations. In one of the critical steps in moving towards integrating sustainability with business strategy, we have undertaken an assessment of material topics for the company. This is being done by the Sustainability team in collaboration with enterprise risk management. The outcome of the exercise will help us in identification of topics that are of importance to us and our stakeholders.

We have strengthened our sustainability framework to embed sustainability in our company culture. We are developing task forces for key sustainability areas, such as, water and waste management, along with commencing organization-wide capacity building initiatives on sustainability. Hindalco has also adopted the sustainability technical standards released by the Group's Sustainability Cell. The Company's sustainability committee which is chaired by the Managing Director reviews progress on various sustainability interventions on a regular basis.

We are known to be a company that is resource-efficient when it comes to consumption of natural resources – either in the form of raw material or in the form of energy consumption. We are proud to be progressing on our targets for improving energy intensity and GHG emission intensity of our operations. This is further strengthened by efforts to improve our renewable energy footprint, wherein we are now close to 50 MW of installed solar power generation capacity across our plants. Our operations are best among the industry when it comes to specific freshwater consumption. These achievements are a result of efforts and innovation by our employees.

MANAGEMENT DISCUSSION & ANALYSIS

We are cognizant of the complex nature of our operations. This puts the health and safety of our employees on the forefront. We take every step to ensure that every person working at our premises reaches home back safely. In order to further strengthen the safety framework, we have introduced a fatality prevention programme. The programme aims to identify areas where safety needs to be improved and we take the necessary steps accordingly.

Our supply chain plays a major role in the smooth running of our operations. To extend our sustainability efforts across the supply chain, we have developed a framework to assess our suppliers on various sustainability parameters. The assessment will help them in the identification of areas of improvement and further enhance sustainability practices in their respective operations.

Being a responsible corporate citizen, we have continued our focus on strengthening the community development framework. This helps in propagating the culture of shared growth among the community.

Detailed initiatives and progress against sustainability key performance indicators are provided as part of our annual sustainability report available on our website.

7. SAFETY

We expect everyone working for Hindalco including contractors & other associates responsible for carrying out various business-related tasks having safety hazards, have the necessary training, skills and competencies. Hindalco has invested 14,75,216 man-hours in need-based safety training in FY 2019-20. It amounts to more than 4 man-days training per person per year. Most of the training sessions were followed by practical competency tests.

Everyone working for us at our manufacturing sites and mines is empowered to intervene when he/she sees any unsafe act, unsafe condition or unsafe practices including stoppage of work if need be. This year employees working at our manufacturing sites & mines made 4,15,658 safety interventions. The practice of safety intervention is further augmented with structured Behaviour Based Safety (BBS) Observation process from FY 2019-20. Our 17 world-class safety standards and 7 guidelines describe the control and physical barriers we require to prevent incidents. To ensure that all our manufacturing sites & mines are safely operated and well-maintained as stipulated in our safety standards and guidelines, the cross-functional internal audit system is in place. Apart from this, we practise a safety audit of each facility by corporate / cross entity team which is carried out once a year using subject matter experts (SMEs) from line functions of other units. If an emergency incident does occur, we have procedures in place to reduce the impact on people, society and the environment. We routinely update and test our emergency response potential by simulating incidents such as a spill, a leak or a fire and conducting mock drills. To test our emergency plans and procedures, we have worked closely with local services and regulatory agencies in the FY 2019-20. These tests not only continually improve our readiness to respond but also foster coordination among various agencies.

We at Hindalco, continually work to minimize the impact and likelihood of incidents. However, some do occur. Regrettably, six people lost their lives in FY 2019-20. Thus our severity rate jumped to 348 in FY 2019-20 from 254 in the FY 2018-19. However, owing to the fewer number of reportable injury accidents, the frequency rate of injuries has come down to 0.38 in year FY 2019-20 as compared to 0.49 in the year FY 2018-19. At the start of year FY 2020-21, Apex Safety Committee of Hindalco spent considerable time reflecting on the safety performance of the Company as measured by the number of fatalities. This included carrying out a full review of Hindalco's safety approach, the effectiveness of various safety programs etc. and what needs to change at Hindalco to prevent fatalities and all other serious incidents. After thorough deliberation, Hindalco decided to implement one additional safety program, i.e. Serious Injury and Fatality (SIF) prevention program from year FY 2020-21 and revisit entire risk assessment of all the tasks carried of all across Hindalco. Since last three years, we are carrying out Qualitative Exposure Assessment (QEA) and Quantitative Exposure Assessment of work environment pollutants like noise, dust, fumes to workmen. We completed this exercise for almost all manufacturing sites/mines of Hindalco in year FY 2019-20, and the recommendations emanated out of these exercises are under active implementation. To further strengthen the occupational health & hygiene aspect, Hindalco implemented three world-class occupational health standards.

8. HUMAN CAPITAL

With around 25,000 direct employees in India and another 11,000 outside the country, people are at the centre of driving excellence at Hindalco. The Aditya Birla Group is one of the most preferred employers in the country. This enables us to attract the required talent and retain them.

Keeping in mind the new normal, we are constantly working on our Employee Value Proposition and innovating our programs and initiatives for holistic employee development. We have designed multiple online programs on both behavioural/leadership and functional/technical aspects. Specially designed programs for building digital capability have also been rolled out. We have extended our Potential Assessment Process to a larger employee population now to create a bigger talent pool and provide career opportunities.

We have strengthened our partnership with the HR Business Partners working closely on talent management, capability building, driving performance and strategic projects with them. This year we have strived to make our performance management process digital by introducing a digital tool for normalization. We have also focused on increased development conversation as well as regular feedback. We have been closely working on increasing employee engagement and building an open, transparent and inclusive culture by working extensively on action plans based on the results of our employee engagement survey.

9. INTERNAL CONTROLS

A strong internal control culture is pervasive throughout the Group. Regular internal audits at all locations are undertaken to ensure that the highest standards of internal control are maintained. The effectiveness of a business' internal control environment is a component of senior management performance appraisals. The principal aim of the system of internal control is the management of business risks, with a view on enhancing shareholder value and safeguarding the Group's assets. It provides reasonable assurance on the internal control environment and against material misstatement or loss.

10. COVID-19 UPDATES

The Company's first and foremost objective has been to protect the health and safety of our workforce across all our facilities. The Company has taken several precautionary measures, which will remain in place until the pandemic crisis is resolved.

I. Operations :

As a part of continuous process manufacturing, the Company's four aluminium smelters, and the Utkal Refinery in India operated at near full capacity during the lockdown. The Company's coal and bauxite mines also operated at regular scale. The aluminium downstream plants in India had shut down initially, except at two locations, while other downstream facilities continued to operate and serve essential sector customers.

In the U.S., Novelis has experienced increased disruption to its global aluminium production and supply chain.

After initial temporary shutdowns, the copper operations have been restarted.

All major Capital Expenditures, excluding maintenance and essential capital expenditures for the next financial year, is being curtailed for both India and Novelis.

II. Customers :

In spite of the operational challenges, Hindalco continued to serve its customers in essential industries, by reorienting supply chains to offer uninterrupted supplies from its warehouses and its operating plants. During the lockdown, Hindalco produced aluminium foil for pharmaceutical packaging of Chloroquine Phosphate, Hydroxychloroquine sulphate tablets and other critical drugs. Hindalco aluminium was used in manufacturing components of life-saving ventilators, components of X-ray and CT scan machines, COVID testing booths and other hospital equipment, Personal Protection Equipment (PPE) kits and sanitizer stands.

III. Employees :

Hindalco-Novelis prioritized the health and safety of the workforce by providing the work-from-home option to the majority of employees in offices, running plant operations with reduced staff, moving a number of employees into the plants to minimize travel, staggering shifts in plants, following strict social distancing, hygiene and safety protocols, and ensuring rigorous cleaning and sanitization of all facilities, colonies, staff buses, etc. The Company continues to take all possible precautions to keep infections at bay.

IV. Communities :

Hindalco has taken on the responsibility of sanitizing and supporting villages around its plants. The Company supplied food, groceries and other essentials to the communities through its CSR teams.

Novelis extended strong support to response and recovery efforts and has directly provided 28 non-profits including local hospitals and food banks, with resources to keep communities safe.

Cautionary Statement

Statements in this "Management Discussion and Analysis" describing the Company's objectives, projections, estimates, expectations or predictions may be "forward looking statements" within the meaning of applicable securities laws and regulations. Actual results could differ materially from those expressed or implied. Important factors that could make a difference to the Company's operations include global and Indian demand supply conditions, finished goods prices, feedstock availability and prices, cyclical demand and pricing in the Company's principal markets, changes in the government regulations, tax regimes, economic developments within India and the countries within which the Company conducts business and other factors such as litigation and labour negotiations. The Company assumes no responsibility to publicly amend, modify or revise any forward looking statements, on the basis of any subsequent development, information events or otherwise.

FINANCIAL HIGHLIGHTS - STANDALONE

(₹ Crore)

PROFITABILITY	2019-20@ US$ in Mn *	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Sales and Operating Revenues	5,676	40,242	45,749	43,446	39,383	36,713	36,869	30,101	28,070	28,297	25,348
Less: Cost of Sales	5,159	36,578	41,503	38,322	34,569	33,367	33,453	27,609	25,866	25,192	22,193
Operating Profit	**517**	**3,664**	**4,246**	**5,124**	**4,814**	**3,346**	**3,417**	**2,492**	**2,204**	**3,105**	**3,155**
Other Income	104	739	940	948	1,005	979	882	1,124	983	616	347
Less: Depreciation, Amortization and Impairment	241	1,708	1,693	1,617	1,428	1,282	837	823	704	690	687
Less: Interest and Finance Charges	237	1,679	1,683	1,901	2,323	2,390	1,637	712	436	294	220
Profit before Exceptional Items and Tax	**143**	**1,016**	**1,810**	**2,554**	**2,068**	**653**	**1,825**	**2,081**	**2,047**	**2,737**	**2,595**
Exceptional Income/ (Expenses) (Net)	(9)	(64)	-	(325)	85	-	(578)	(396)	-	-	-
Profit/ (Loss) before Tax from Continuing Operations	**134**	**952**	**1,810**	**2,229**	**2,153**	**653**	**1,247**	**1,685**	**2,047**	**2,737**	**2,595**
Less: Tax Expenses	47	332	605	793	596	99	322	272	347	500	458
Profit/ (Loss) from Continuing Operations	**87**	**620**	**1,205**	**1,436**	**1,557**	**554**	**925**	**1,413**	**1,699**	**2,237**	**2,137**
Profit/ (Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	-	(2)	-	-	-	-	-
Profit/ (Loss) for the Period	**87**	**620**	**1,205**	**1,436**	**1,557**	**552**	**925**	**1,413**	**1,699**	**2,237**	**2,137**
Business Reconstruction Reserve (BRR)#											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	-	682	97	86	-	-	-
Profit/ (Loss) for the Period had the expenses not adjusted against BRR	87	620	1,205	1,436	1,557	(130)	828	1,327	1,699	2,237	2,137

FINANCIAL POSITION											
Gross Fixed Assets (excluding CWIP)	6,676	50,296	48,898	48,264	46,742	43,316	35,434	26,804	15,073	14,478	14,287
Capital Work-in-Progress (CWIP) **	170	1,282	982	737	712	3,079	10,744	17,277	23,605	16,257	6,030
Less: Accumulated Depreciation, Amortization and Impairment	**2,247**	**16,928**	**15,376**	**13,900**	**12,358**	**11,063**	**9,374**	**8,749**	**7,975**	**7,328**	**6,703**
Net Fixed Assets	**4,599**	**34,650**	**34,504**	**35,101**	**35,096**	**35,332**	**36,804**	**35,332**	**30,703**	**23,407**	**13,615**
Investments	3,270	24,639	25,495	27,025	29,332	27,311	21,251	21,907	20,482	18,087	18,247
Other Non-Current Assets / (Liabilities) (Net)	(295)	(2,223)	(1,565)	(708)	516	(1,038)	(1,193)	(1,174)	(751)	(207)	2,096
Net Current Assets	1,523	11,472	9,658	8,330	9,539	9,230	9,400	8,339	8,409	5,319	4,782
Capital Employed	**9,097**	**68,538**	**68,092**	**69,748**	**74,483**	**70,835**	**66,262**	**64,404**	**58,843**	**46,606**	**38,740**
Less: Loan Funds	3,059	23,044	19,534	20,297	27,150	28,676	29,007	27,672	24,871	14,574	9,040
Net Worth	**6,038**	**45,494**	**48,558**	**49,451**	**47,333**	**42,159**	**37,255**	**36,732**	**33,972**	**32,032**	**29,700**

(₹ Crore)

	2019-20@ US$ in Mn *	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Net Worth represented by :											
Equity Share Capital	29	222	222	223	223	205	207	206	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	-	-	541	541	-
Reserves and Surplus	5,771	43,482	43,285	42,497	41,235	36,568	37,049	36,526	33,240	31,300	29,509
Other Comprehensive Income	238	1,790	5,051	6,731	5,875	5,386	-	-	-	-	-
	6,038	**45,494**	**48,558**	**49,451**	**47,333**	**42,159**	**37,255**	**36,732**	**33,972**	**32,032**	**29,700**

RATIOS AND STATISTICS

	Unit	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Operating Margin	%	9.11	9.28	11.79	12.22	9.11	9.27	8.28	7.85	10.97	12.45
Net Margin	%	1.54	2.63	3.31	3.95	1.50	2.51	4.70	6.05	7.91	8.43
Gross Interest Cover^	Times	2.62	3.08	3.18	1.73	1.81	1.75	1.50	1.61	3.62	5.74
Net Interest Cover	Times	2.62	3.08	3.19	2.51	1.81	2.63	5.08	7.31	12.67	15.92
ROCE	%	3.93	5.13	6.39	5.90	4.30	5.22	4.34	4.22	6.50	7.27
ROE	%	1.36	2.48	2.90	3.29	1.31	2.48	3.85	5.00	6.98	7.20
Basic EPS	₹	2.79	5.41	6.45	7.56	(0.64)	4.48	7.09	8.88	11.69	11.17
Diluted EPS	₹	2.79	5.41	6.45	7.55	(0.64)	4.48	7.09	8.87	11.68	11.16
Cash EPS^^	₹	10.47	13.01	13.70	14.49	8.95	8.53	11.22	12.55	15.29	14.76
Dividend per Share ##	₹	1.00	1.20	1.20	1.10	1.00	1.00	1.00	1.40	1.55	1.50
Capital Expenditure (Cash outflow)	₹ Crore	1,395	1,263	1,178	1,041	1,399	2,073	3,458	5,531	7,168	5,749
Debt Equity Ratio	Times	0.51	0.40	0.41	0.57	0.68	0.78	0.75	0.73	0.45	0.30
Book value per Share	₹	202.49	216.25	220.28	211.00	204.16	180.41	177.92	177.44	167.31	155.14
Market Capitalisation$	₹ Crore	21,502	46,145	48,166	43,756	18,162	26,638	29,266	17,538	24,774	40,040
Number of Equity Shareholders	Nos.	3,32,014	3,04,345	2,99,521	3,19,783	3,92,888	3,38,655	3,61,686	4,41,166	3,83,724	3,20,965
Number of Employees	Nos.	22,477	22,865	23,555	23,679	24,118	21,976	20,902	20,238	19,975	19,341
Average Cash LME (Aluminium)	US$	1,749	2,035	2,046	1,688	1,592	1,888	1,773	1,976	2,317	2,257
Average Cash LME (Copper)	US$	5,855	6,337	6,451	5,152	4,852	6,556	7,103	7,855	8,485	8,140

* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

** Including Intangible assets under development

\# Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

\## Proposed/Interim Dividend for the Period

@ Figures for FY 2019-20, FY 2018-19, FY 2017-18, FY 2016-17 and FY 2015-16 are as per Ind AS compliant financial statements. Previous periods figures are as per Previous GAAP financial statements.

$ including Treasury shares held by the Company

^ Gross interest coverage ratio is calculated as Operating Profit plus Other Income divided by Interest and Finance Charges plus Finance costs transferred to Capital Work-in-Progress/ Intangible Assets under development

^^ Cash EPS is calculated as Profit/ (Loss) for the year plus Depreciation, Amortization and Impairment divided by Weighted average numbers of equity shares

FINANCIAL HIGHLIGHTS - CONSOLIDATED

₹ in Crore

	2019-20@	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
PROFITABILITY	**US$ in Mn ***										
Sales and Operating Revenues	16,664	1,18,144	1,30,542	1,15,820	1,02,631	1,01,202	1,06,696	90,007	82,243	82,549	73,703
Less: Cost of Sales	14,640	1,03,794	1,15,042	1,01,899	90,183	92,387	97,751	81,721	74,406	74,365	65,775
Operating Profit	**2,024**	**14,350**	**15,500**	**13,921**	**12,448**	**8,815**	**8,944**	**8,286**	**7,837**	**8,184**	**7,929**
Other Income	167	1,186	1,127	1,105	1,111	1,189	1,105	1,017	1,012	783	513
Less: Depreciation, Amortization and Impairment	724	5,135	4,766	4,607	4,469	4,507	3,591	3,553	2,861	2,864	2,759
Less: Interest and Finance Charges	592	4,197	3,778	3,911	5,742	5,134	4,178	2,702	2,079	1,758	1,839
Profit before Share in Equity Accounted Investments, Exceptional Items and Tax	**875**	**6,204**	**8,083**	**6,508**	**3,348**	**362**	**2,280**	**3,049**	**3,909**	**4,345**	**3,843**
Share in Profit/(Loss) in Equity Accounted Investments (Net of Tax)	1	4	-	(125)	(25)	172	175	67	(16)	50	(57)
Profit before Tax and Exceptional Items	**876**	**6,208**	**8,083**	**6,383**	**3,323**	**534**	**2,455**	**3,116**	**3,893**	**4,395**	**3,786**
Exceptional Income/(Expenses) (Net)	(40)	(284)	-	1,774	(8)	(577)	(1,940)	(396)	-	-	-
Profit/(Loss) before Tax from Continuing Operations	**836**	**5,924**	**8,083**	**8,157**	**3,315**	**(43)**	**515**	**2,720**	**3,893**	**4,395**	**3,786**
Less: Tax Expenses	304	2,157	2,588	2,074	1,433	498	256	525	886	786	964
Profit/(Loss) from Continuing Operations	**532**	**3,767**	**5,495**	**6,083**	**1,882**	**(541)**	**258**	**2,195**	**3,007**	**3,608**	**2,822**
Profit/(Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	-	(161)	-	-	-	-	-
Profit/(Loss) before Non-Controlling Interest	**532**	**3,767**	**5,495**	**6,083**	**1,882**	**(702)**	**258**	**2,195**	**3,007**	**3,608**	**2,822**
Less: Non-Controlling Interest in Profit/(Loss)	-	-	(1)	-	(18)	(451)	(596)	20	(20)	211	366
Net Profit/(Loss) for the Period	**532**	**3,767**	**5,496**	**6,083**	**1,900**	**(251)**	**854**	**2,175**	**3,027**	**3,397**	**2,456**
Business Reconstruction Reserve (BRR)#											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	-	682	97	86	-	500	(3,439)
Profit/(Loss) for the Period had the expenses not adjusted against BRR	**532**	**3,767**	**5,496**	**6,083**	**1,900**	**(933)**	**757**	**2,089**	**3,027**	**2,896**	**5,896**
FINANCIAL POSITION											
Gross Fixed Assets (excluding CWIP)	18,626	1,40,334	1,30,142	1,25,094	1,21,186	1,23,522	1,01,940	87,914	60,054	53,961	48,207
Capital Work-in-Progress (CWIP) **	1,025	7,721	4,098	2,063	1,814	4,214	14,111	23,059	33,834	22,798	9,253
Less: Accumulated Depreciation, Amortization and Impairment	6,788	51,139	44,283	40,006	36,499	37,849	29,981	26,750	22,126	18,661	15,802
Net Fixed Assets	**12,863**	**96,916**	**89,957**	**87,151**	**86,501**	**89,887**	**86,070**	**84,223**	**71,763**	**58,098**	**41,657**
Investments	1,249	9,411	9,012	10,781	15,157	12,438	12,346	12,961	12,601	10,551	10,855
Other Non-Current Assets/ (Liabilities) (Net)	(1,647)	(12,407)	(9,581)	(8,497)	(6,737)	(8,859)	(7,235)	(6,924)	(6,573)	(5,758)	(3,142)
Net Current Assets	4,203	31,664	20,538	17,499	14,961	15,074	16,571	18,289	16,901	11,771	11,330
Capital Employed	**16,668**	**1,25,584**	**1,09,926**	**1,06,934**	**1,09,882**	**1,08,540**	**1,07,752**	**1,08,549**	**94,692**	**74,662**	**60,700**
Less: Loan Funds	8,927	67,257	52,416	52,074	63,817	67,552	68,467	66,163	57,603	41,042	29,460
Less: Non-Controlling Interest	1	10	9	9	6	381	956	1,781	1,759	1,709	2,217
Net Worth	**7,740**	**58,317**	**57,501**	**54,851**	**46,059**	**40,607**	**38,329**	**40,605**	**35,330**	**31,911**	**29,023**

₹ in Crore

	2019-20@ US$ in Mn*	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Net Worth represented by :											
Equity Share Capital	29	222	222	223	223	205	207	206	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	-	6	541	541	-
Equity Component of Compound Financial Instruments	1	4	4	4	4	3	-	-	-	-	-
Reserves and Surplus	7,377	55,577	52,599	47,644	41,770	36,443	38,122	40,393	34,597	31,179	28,832
Other Comprehensive Income	333	2,514	4,676	6,980	4,062	3,956	-	-	-	-	-
	7,740	**58,317**	**57,501**	**54,851**	**46,059**	**40,607**	**38,329**	**40,605**	**35,330**	**31,911**	**29,023**

RATIOS AND STATISTICS

	Unit	2019-20@	2018-19@	2017-18@	2016-17@	2015-16@	2014-15	2013-14	2012-13	2011-12	2010-11
Operating Margin	%	12.15	11.87	12.02	12.13	8.71	8.38	9.21	9.53	9.91	10.76
Net Margin	%	3.19	4.21	5.25	1.85	(0.25)	0.80	2.42	3.68	4.12	3.33
Gross Interest Cover^	Times	3.57	4.37	3.83	2.36	1.91	1.95	1.85	2.04	3.16	3.56
Net Interest Cover	Times	3.70	4.40	3.84	2.36	1.95	2.41	3.44	4.26	5.10	4.59
ROCE	%	8.28	10.79	9.74	8.27	5.06	5.99	5.30	6.32	8.17	9.36
ROE	%	6.46	9.56	11.09	4.13	(0.62)	2.23	5.36	8.57	10.64	8.46
Basic EPS	₹	16.94	24.67	27.30	9.22	(4.55)	4.14	10.91	15.81	17.74	12.84
Diluted EPS	₹	16.93	24.66	27.29	9.22	(4.55)	4.13	10.91	15.81	17.74	12.83
Cash EPS^^	₹	40.03	46.07	47.98	30.91	20.78	21.53	28.73	30.75	32.70	27.25
Capital Expenditure (Cash outflow)	₹ Crore	6,791	6,005	3,001	2,938	4,245	5,978	9,424	11,871	12,512	7,909
Debt Equity Ratio	Times	1.15	0.91	0.95	1.39	1.66	1.79	1.63	1.63	1.29	1.02
Book Value Per Share	₹	259.56	256.07	244.33	205.32	196.64	185.61	196.67	184.53	166.68	151.61

* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

** Including Intangible assets under development.

\# Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

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^ Gross interest coverage ratio is calculated as Operating Profit plus Other Income divided by Interest and Finance Charges plus Finance costs transferred to Capital Work-in-Progress/ Intangible Assets under development

^^ Cash EPS is calculated as Profit/ (Loss) for the year plus Depreciation, Amortization and Impairment divided by Weighted average numbers of equity shares