Management Discussion and Analysis

Centre for Light Weighting Technology (CLWT), Nellore, India

Economic Review

Global Economy

The global economy registered a tepid growth of 2.9% in Calendar Year (CY) 2019 as against 3.6% in CY 2018, the slowest since the FY 2008 global financial crisis. Elevating trade barriers, lowering global manufacturing activity, the unfavorable impact of Brexit on European trade, and country-specific shocks slowing down emerging market economies dampened the global economic growth.

Emerging Markets and Developing Economies (EMDEs) witnessed slower economic growth of 3.7% in CY 2019 as against 4.5% in CY 2018. The lower growth was on account of country-specific shocks, especially in India, Brazil, Mexico, Russia, and South Africa. India saw a sharp decline in consumption due to the non-banking financial companies (NBFC) crisis and a subsequent decline in credit growth.

Among the Advanced Economies (AEs), economic growth of the United States of America (USA), after recording 2.9% in CY 2018, declined to 2.3% in CY 2019 after several quarters of above-trend performance. Britain's exit from the European Union at the end of January 2020 came with looming uncertainty over a trade deal and muted European economic growth to 1.3% in CY 2019 as against 1.9% in CY 2018. The lower growth of USA and Europe weighed down the performance of AEs as well; they grew at a lower than estimated rate of 1.7% in CY 2019 as against 2.2% in CY 2018.

(Source: IMF World Economic Outlook June 2020)

Outlook

Despite many challenges, manufacturing activity and global trade were showing tentative signs of bottoming out towards the end of CY 2019. Major economies' broad-based shift to accommodative monetary policy, a favorable trade deal between USA and China, and reduced risk of no-deal Brexit supported a faster economic recovery. Keeping cognizance of these positive triggers, the International Monetary Fund (IMF) had estimated global economic growth at 3.3% in CY 2020 and expected it to inch up to 3.4% in CY 2021.

However, the outbreak of COVID-19 (novel coronavirus disease of FY 2019), declared a pandemic by the World Health Organization on March 11, 2020, derailed all estimates. The impact of COVID-19 spread across all nations and restricted their economic activity with lockdowns. As a result, the IMF has projected global output to decline by 4.9 % in CY 2020. However, it expects a sharp recovery in CY 2021 at 5.4%, provided the virus spread is successfully contained and economic activities return to pre-COVID levels.
(Source: World Economic Outlook June 2020, International Monetary Fund)

Indian Economy

Financial Year (FY) 2020 has been a challenging year for the Indian economy, impacted by global gloom and internal issues. The country witnessed a subdued gross domestic product (GDP) growth rate of 4.2% in FY 2020, a sharp drop from 6.1% in FY 2019 and the slowest in the past seven years. Three of the four key growth engines – private consumption, private investments, and exports – witnessed a severe slowdown during the year. The fourth engine – government consumption and investment – also fell short of reviving economic sentiment due to rising budgetary deficit pressures.

The NBFC crisis, coupled with subdued economic activity, impacted key Indian sectors such as automobile, aviation, and real estate. The Indian automobile industry underwent one-of-a-kind challenging environment; it was affected by both the global slowdown and domestic hindrances such as liquidity crunch, GST, and BS-VI implementation.
(Sources: IMF World Economic Outlook June 2020, The Ministry of Finance, CMIE, Deloitte)

Outlook

Despite the pre-COVID challenges, the Government of India (GoI) remains confident of reviving the economic growth and fulfilling its target of becoming a USD 5 Trillion economy by FY 2024. To meet this objective, it undertook various reformative policies and initiatives such as the National Infrastructure Pipeline (NIP), liberalization of FDI norms in select sectors, and recapitalization of public sector banks to alleviate the country's liquidity concerns, among others.

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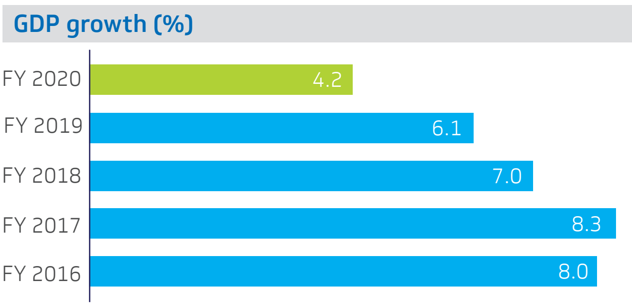
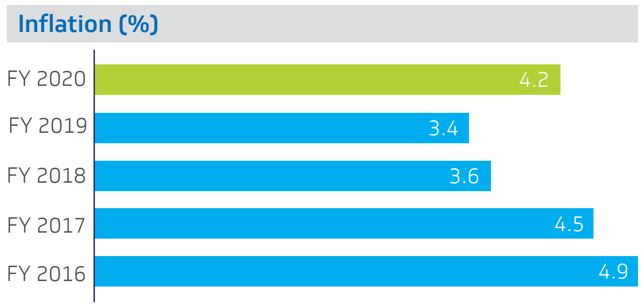
Open Die Forging Heat Treatment

However, all the efforts took a backseat with the nation battling the COVID-19 pandemic since March 2020. The nationwide lockdown restricted movement of goods and people, disrupting manufacturing and supply chains and nearly paralyzing consumption. The IMF has projected a deeper 4.5% contraction for India in FY 2021 than earlier estimated, citing the longer lockdown period and slower than anticipated recovery.

The Government, balancing the country's economic and health needs, announced a comprehensive stimulus package to the tune of 10% of GDP under the Self-Reliant India Movement (Aatmanirbhar Bharat Abhiyan). This is expected to help different sectors of the economy and counter the economic decline. Also, the slump in international crude oil prices is likely to enable the GoI to lower its current account and fiscal deficit.
(Source: IMF World Economic Outlook June 2020)

India: Real GDP growth and its components





Business Environment

Automobile Business

Global Automobile Industry

The global automobile industry is undergoing an evolution, as stringent emission norms across major economies propel a shift from diesel to electric vehicles. Amidst this, the global auto industry continued to witness a slowdown in CY 2019. While major markets like Brazil, Russia, India and Europe declined, the impact of demand drop in China and the USA, two of the world's largest automobile markets, was greater.

Weak credit growth, more demand for used vehicles, new emission standards, and depressed consumer incomes contracted demand for light vehicles globally.

On a positive note, easing trade tensions and accommodative monetary policies by major economies are likely to revive global economic activity and benefit the automobile industry.

Though CY 2019 witnessed growth in the heavy truck market volumes, higher equipment costs, uncertain demand, enough available capacity and weak freight market will weigh on the segment in the future. After 2 years of strong growth, demand for class-8 trucks in the US has plateaued amidst economic slowdown and inventory overhang. The demand for Heavy Commercial Vehicles (HCV) in Europe also declined owing to the slower economic activity in the region.

(Source: Fitch Ratings, International Organisation of Motor Vehicle Manufacturers)

Outlook

COVID-19 is likely to continue affecting global production for many auto producers and suppliers, impacting auto sales. Vehicle sales globally are also likely to decline due to the liquidity crunch, falling consumer sentiment, and higher than expected unemployment levels. In this backdrop, CY 2020 is likely to be a challenging year for the global automotive industry. Other negative factors are intense competition, trade disputes, excess inventory, emission norms change, and emergence of Connected, Autonomous, Shared, and E-mobility (CASE). On a positive note, easing trade tensions and accommodative monetary policies by major economies are likely to revive global economic activity and benefit the automobile industry.

The Company continues to leverage its strong relationship with customers to focus on increasing content per vehicle and intensifying new product introductions globally in collaboration with OEMs.

Auto Component Machining Line

Company Review of the Exports Auto Market

Commercial Vehicles (CV)

FY 2020 was a rather challenging year for the commercial vehicles business due to weak demand in major end markets.

In the USA, lower freight activity and increased freight capacity after two consecutive years (CY 2018 and CY 2019) of strong growth in US class-8 truck production have subdued the scope for fleet expansion in CY 2020. Consequently, OEMs became cautious and cut production in line with the lower demand and facilitate dealer inventory destocking.

In Europe, despite the slowdown in the second half of the year, the commercial vehicles market rose 2.5% in CY 2019. Having recorded seven consecutive years of growth, the European commercial vehicles industry is also bracing for a slowdown in CY 2020. Following the COVID-19 contagion, the heavy commercial vehicle industry is likely to remain under pressure, as consumer demand remains low for some time.

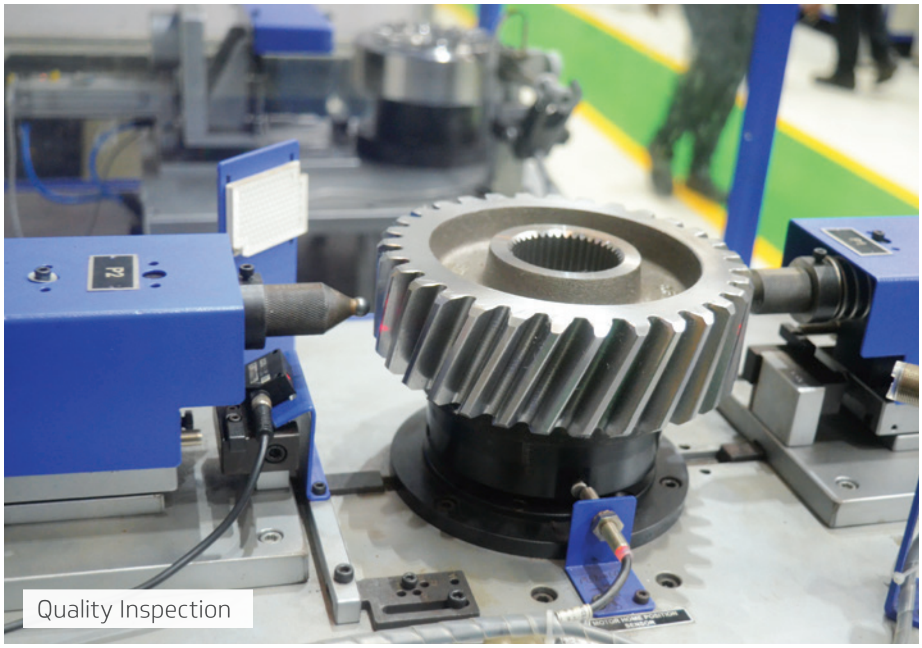
Commercial vehicles export revenues for the Company stood at ₹ 12,702 Million in FY 2020 as compared to ₹ 15,912 Million in FY 2019, a drop of 20.2%. The Company continues to leverage its strong relationship with customers to focus on increasing content per vehicle and intensifying new product introductions globally in collaboration with OEMs.

Heavy Vehicle Production Trend

Year	US Class 8 Trucks (Nos.)	Europe HCV (Nos.)
CY 2019	344,558	318,598
CY 2018	324,289	316,889
CY 2017	255,590	305,401
CY 2016	228,347	296,226
CY 2015	323,282	267,280
CY 2014	297,120	225,140

Source: [ACT Research, European Automobile Manufacturers Association (ACEA)]

The Company recorded sales of ₹ 5,046 Million in FY 2020 in PV exports as against ₹ 4,875 Million in FY 2019.



Quality Inspection

Passenger Vehicles (PV)

The Company's Passenger Vehicles (PV) exports business continued to perform well in FY 2020 on the back of new product introduction, increasing market share with existing clients, and endeavor to move up the value chain with new value-added products. The Company recorded sales of ₹ 5,046 Million in FY 2020 in PV exports as against ₹ 4,875 Million in FY 2019.

The Company expects the contribution of the PV exports business to increase, as it widens product portfolio and adds new customers.

The Company had re-entered the PV exports segment in FY 2014, a strategic move that opened up a substantial lateral opportunity to capture the shift in the PV market. In line with this strategy, it has increased the share of PV exports revenue to 12% in FY 2020 from 2% in FY 2014.

Indian Automotive Industry

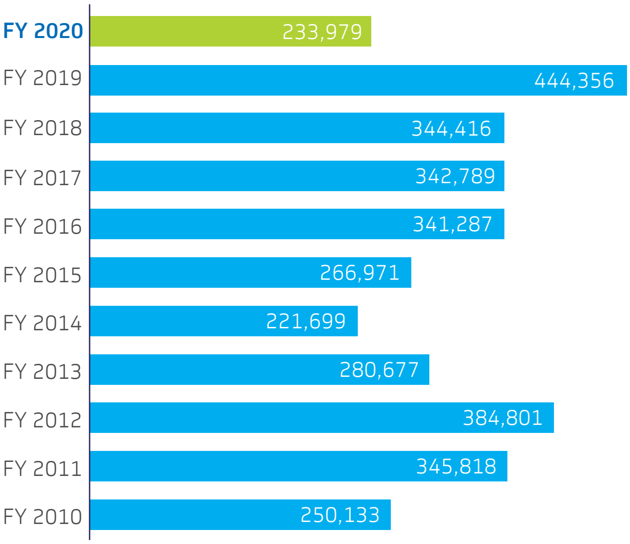
India ranks as the fourth largest automobile market globally. The large working-age population, the expanding middle class, increasing urbanization, and significant infrastructure development have supported the industry's growth. Apart from the massive structural demand, the industry's progress in recent years can be attributed to its investment in new technologies and focus on aligning with the rapidly changing global automotive landscape.

However, FY 2020, proved to be one of the toughest for the Indian automobile industry, primarily driven by extreme weakness in the commercial vehicles segment. The industry players, in anticipation of pre-buying of BS-IV compliant commercial vehicles, ahead of BS-VI norms implementation from April 2020, ramped up their production. But the pre-buying did not materialize, hindered by unavailability of financing due to the acute NBFC crisis, and increased load carrying capacity of existing fleet due to change in axle loading norms and enhanced transport efficiency post-GST implementation. This resulted in excess BS-IV inventory, forcing OEMs to cut back on new production and instead focus on reducing the stock of BS-IV vehicles.

This resulted in a sharp year-on-year decline of 32.4% in CV production in FY 2020. Within the commercial segment, medium and heavy commercial vehicle production declined by 47.3% whereas the light commercial vehicle segment declined by 22.5%.

Passenger vehicles production in India also declined 14.8% in FY 2020 as against FY 2019, within which production of utility vehicles displayed a marginal growth of 1.9%.

M&HCV Production Trend (Nos.)



(Source: SIAM)

Outlook

The automobile industry is cyclical in nature. However, current down cycle is expected to last a little longer due to several factors – implementation of BS-VI norms, after which automobile purchase cost will increase, a slow recovery in the macro-economy, and decline in infrastructure development. COVID-19 and the lockdown had a particularly disruptive impact on the automobile industry. Against this backdrop, the Indian PV and CV segments are likely to experience a subdued demand and production in FY 2021.

Company Review of the Indian Auto Industry

Commercial Vehicles

In line with the broad-based slowdown in the industry, the Company's revenue from the commercial vehicles segment declined 52.7% to ₹ 5,182 Million in FY 2020 as against ₹ 10,948 Million in FY 2019.

To minimize the impact of the downturn, the Company is focusing on right-sizing production levels and reducing costs. There is now increased focus on R&D and innovation to develop new BS-VI compliant products, improve vehicle efficiency, and increase content per vehicle.

With the industry transitioning from BS-IV to BS-VI standards from April 1, 2020, the Company is fully prepared to capture this opportunity and to maintain its leading position in the domestic market.

Passenger Vehicles

The passenger vehicles segment was in a slump during the year. However, its structural trend remains extremely positive as India prepares for BS-VI transition. The Company, during the year, added new customers and increased its presence in the segment. This enabled it to perform better than the underlying market as the segment's revenues in FY 2020 declined by 4.6% as against an industry decline of 14.8%.

The Company will continue to focus on its growth trajectory in PVs by introducing value-added products, enhancing focus on R&D and building relations with new OEMs.

Industrial Business

To lower its dependence on the automotive business and to leverage its extensive R&D capabilities, the Company has diversified into synergistic industrial businesses. It engages in manufacturing components for Defence and Aerospace, Power, Oil & Gas, Construction & Mining, Agriculture, Railways, Marine and General Engineering sectors. Having built robust capabilities, the Company has established itself as one of the leading players catering to top industrial customers globally.

Company Review of the Export Industrial Segment

The Export Industrial business delivered a lackluster performance in FY 2020, following a slowdown in its key markets. Revenues from the segment declined 46.9% to ₹ 8,753 Million in FY 2020 from ₹ 16,472 Million in FY 2019.

The Oil & Gas industry in North America was severely impacted, as the advent of the pandemic and the subsequent closure of economies across the globe brought drilling activities to a halt and oil prices plunged across the world. This adversely impacted the Company's revenues from this segment, declining from a peak of over ₹ 10,000 Million in FY 2019 to less than ₹ 5,000 Million in FY 2020. While this segment's revenue is likely to decline further in FY 2021, the Company is witnessing stable demand in the high horsepower engine as well as construction & mining segments, which could support its performance.

Having built robust capabilities, the Company has established itself as one of the leading players catering to top industrial customers globally.

Moving into FY 2021, the outlook for the Company's Industrial vertical remains challenging, owing to the subdued industrial activity across its key markets. In this backdrop, the Company's strategy will be to continue diversifying by adding new customers and products as well as pursuing inorganic growth opportunities.

Company Review of the Domestic Industrial Segment

In the Domestic Industrial segment, the Company caters to sectors such as Engineering, Agriculture, Construction & Mining, and Public Sector Utilities, including Defence and Power. Growth in these industries, being significantly linked to government spending, faced headwinds in FY 2020 with broad-based slowdown witnessed in economic and industrial activity of the country. This hit the segment's performance, and revenues declined 20.5% to ₹ 8,058 Million in FY 2020 from ₹ 10,133 Million in FY 2019.

Even as the short-term outlook of the Domestic Industrial space is likely to be subdued, it presents significant long-term opportunities, with the structural growth triggers in place. Recent Government of India initiatives such as the Sagarmala project, National Infrastructure Pipeline (NIP), and liberalization of coal mining and the space sector to private entities, among others, will provide a much-needed fillip to the activity levels.

Defence and Aerospace Business

The Company continues on its growth trajectory in the Defence segment by diversifying into additional business opportunities, while maintaining Artillery systems and Protected Vehicles as its mainstay. It has made significant value additions, despite cycles of extreme volatility observed in the Indian Defence market. The Company has leaped forward to capitalize on the growing potential and contribute to 'Make in India'.

Kalyani Rafael Advanced Systems (KRAS), a joint venture between Kalyani Group and Rafael Advanced Defence Systems, Israel, received its first major export order worth USD 100 Million, to make units of Barak-8 missile kits over the next four years.

During the year, the Company, with the aim of aligning itself with the evolving defence requirements and export markets, established a defence technology and research ecosystem at the Kalyani Centre for Technological Innovation (KCTI) and Kalyani Centre for Manufacturing Innovation (KCMI). This will enable the Company to foster indigenous innovation in advanced technologies involved in critical Defence systems. The dedicated R&D can be utilized to build and thereafter manufacture next-generation weapons and defence systems .

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Turbo Charger Machining Centre

The Company established two Defence Incubation centers to imbibe technologies and build competencies in Augmented Reality (AR), RF Systems, INS, Artificial Intelligence and Data Analytics, etc. This would enable critical product design, engineering, manufacturing and produce new or upgraded defence products, thereby supporting the Company's objective of achieving sustainable growth in the segment's revenue and profitability levels in the following years.

The Company has also made some strategic investments/ acquisitions in Eternus, AERON and KPIT Defence, to augment its defence technological capability. The adopted model of mentoring by foreign technology experts at Defence Incubation centers and collaboration with technological start-ups have given the Company access to state-of-the-art defence technologies. It is now well-positioned to venture into additional fields of Marine systems, including Weapon Control Systems (WCS), Command & Control Systems (CMS), and product improvements/upgrades, among others.

During the recently concluded Defexpo 2020 in Lucknow, Uttar Pradesh, the Company showcased its indigenously built technological capabilities and strengths across diverse spectrums of defence manufacturing, including Artillery, Protected Vehicles, Composites, and Augmented Reality. The signing of Memorandums of Understanding (MoUs) with established global defence firms like Paramount, General Atomics and an unprecedented number of business visitors to the Bharat Forge pavilion clearly indicate its growing prominence in both the Indian and global defence markets.

The Company's core metallurgical expertise and its capability to develop many indigenous defence systems are helping it move towards becoming a defence manufacturing hub. Its production facilities are being upgraded accordingly.

Strategic Business

The Company's Strategic Business is a newly formed division that focuses on light-weighting, transmission components, e-mobility, and future technologies. It would greatly aid the Company in tapping market opportunities emerging from the rapid technological changes.

Review of Business in focus areas of Strategic Business Division

Light-weighting: The Company continues to target opportunities in the areas of light-weighting of vehicles and industrial products to achieve greater operational

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efficiency. To meet this objective, it has commissioned a greenfield project at Nellore district, in the state of Andhra Pradesh and started its pilot production in March 2020. The Nellore facility houses state-of-the-art high-pressure die-casting machineries, heat treatment, and machining and measurement equipment.

The primary focus areas here are reducing the weight of structural components used in automobile and industrial applications, along with developing components for e-mobility requirements. The Company has been successfully bagging orders for the domestic as well as the export markets and gearing up to scale the production to meet the growing demand.

Transmission components: The Company, to undertake the development of high-tech, high-precision, low NVH and high DIN standard requirements for the transmission and driveline components, has commissioned a facility in Chakan, Maharashtra, with modern and dedicated manufacturing lines. The facility commenced production in FY 2020 and has started supplying products to its key customers in Europe, China, and the USA.

E-mobility: In the e-mobility space, the Company has established two business lines, including complete e-powertrain integration and e-powertrain component for two/three-wheelers and commercial vehicles for goods and passenger transportation. The Company has bought stakes in Tork Motors and Tevva Motors and formed a 50:50 JV with REFU Elektronik GmbH to gain technical knowhow in this domain and achieve a faster go-to-market strategy.

REFU Drive: Headquartered in Pfullingen, Germany, REFU Elektronik specializes in power electronics (inverters, DC-DC converters and on-board chargers) for off-road e-vehicle drive applications. REFU's technological specialization in the e-mobility domain, coupled with the Company's competent design and development center in Pune, Maharashtra, gives Bharat Forge Limited a headstart in the development of power electronic components for Indian customers.

Tork Motors successfully completed the homologation of its first model of electric motorcycle and e-powertrain for three-wheeled passenger and cargo vehicles.


Engineers at the die-manufacturing process

Tevva Motors: Tevva Motors primarily focuses on e-powertrain integration for electrification of commercial vehicles and buses and undertakes complete design and assembly of the entire e-powertrain, including the integration of its core technologies. It provides a broad range of e-powertrain solutions and has started product deliveries and services in European markets during the year. As part of the investment agreement, apart from working on developing and supplying components for the above applications, the Company has also acquired exclusive sales and technology license for the Indian market. The Company, with the support of Tevva, has started road trials of commercial electric trucks in India to understand the performance of key components such as battery and motor, and is engaged with multiple customers for developing electrified trucks and buses. Because of the global lockdown caused by COVID-19 pandemic, the Company as a prudent accounting policy, written down its investments in Tevva Motors

Tork Motors: Tork Motors is a leading developer of technology for electric motorcycles and electric three-wheeler powertrains. Backed by its team's extensive research undertakings in developing solutions for the Indian market, the Company now possesses the technological expertise to indigenously manufacture electric motorcycle and electric three-wheelers. During the year, Tork Motors successfully completed the homologation of its first model of electric motorcycle and e-powertrain for three-wheeled passenger and cargo vehicles. It also filed 11 patents and around 40 Intellectual Property (IP) right applications on design and trademarks during the year. The Company targets higher content per vehicle by supporting Tork Motors with critical components such as inverters (which are under development) and die-cast enclosure for battery and power components.

The Company's investment in Tork and Tevva provides it with access to low-voltage and high-voltage electrification technologies and will support its objective of increasing content per vehicle. Bharat Forge is proactively providing these companies with capital funding, skilled and competent manpower to expedite the new product developments, and a robust and extensive supply chain to improve speed-to-market efficiency at reduced costs.

The Company has been able to achieve significant synergies due to its in-house competencies in power electronics and wide product portfolio from the JV with REFU. This is helping it generate encouraging business opportunities with many customers for standalone products such as motor controllers, DC-DC converters, and on-board chargers for electric vehicles. These products are expected to be launched in FY 2021.

Financial Review

Standalone

Analysis of Standalone Profit and Loss Statement

(in ₹ Million)

Particulars	FY 2020	FY 2019	% Change
Shipment Tonnage	201,586	265,952	-24.2%
Domestic sales	17,818	26,268	-32.2%
Export Sales	26,502	37,258	-28.9%
Other Operating Income	1,319	1,674	-
Total Revenue	45,639	65,200	-30.0%
Raw Material	17,489	24,357	-28.2%
Manufacturing Expenses	7,831	10,908	-28.2%
Manpower Cost	4,824	4,863	-0.8%
Other Expenditure	5,096	6,311	-19.3%
Total Expenditure	35,240	46,439	-24.1%
EBITDA	10,399	18,761	-44.6%
EBITDA %	**22.8%**	**28.8%**	**-**
Depreciation	3,449	3,466	-0.5%
Interest	1,450	1,024	41.6%
Other Income	1,609	1,660	-3.1%
PBT	7,109	15,931	-55.4%
Exchange Gain/(Loss)	(244)	300	-
PBT	6,865	16,231	-57.7%
Exceptional Item	(939)	-	-
PBT	5,926	16,231	-63.5%
Taxation	1,191	5,518	-
PAT	4,735	10,713	-55.8%

Analysis of Standalone Balance Sheet Statement

(in ₹ Million)

Particulars	March 31, 2020	March 31, 2019
Long-Term Debt	18,351	15,722
Working Capital Loan and Bill Discounting	14,084	16,220
Equity	53,551	53,982
Cash	18,821	17,252
D/E	0.61	0.59
D/E (Net)	0.25	0.27
RoCE	9.5%	21.2%
RoNW	8.8%	19.8%

(D/E – Debt Equity, RoCE – Return on Capital Employed, RoNW – Return on Net Worth)

A cyclical downtrend in the global auto industry was aggravated by the onset of the COVID-19 pandemic and subsequent lockdowns. As a result, the Company's revenues from the commercial vehicle segment declined significantly in both domestic as well as export markets. Additionally, the industrial segment witnessed significant demand contraction in the key sectors, including Oil & Gas and Construction & Mining, from which the Company derives significant revenues.

The Company suffered operating de-leverage as its total income declined while fixed costs stayed elevated. This impacted the EBITDA margin as it declined by 600 basis points (bps) from 28.8% in FY 2019 to 22.8% in FY 2020. The Company's net profit (PAT) for FY 2020 was further impacted on account of higher exchange loss and exceptional items, largely incurred on impairment of investments in Tevva Motors and towards voluntary retirement scheme (VRS).

Consolidated

Analysis of Consolidated Profit and Loss Statement

(in ₹ Million)

Particulars	FY 2020	FY 2019	% Change
Total Revenue	80,558	101,457	-20.6%
Raw Material	35,765	42,143	-15.1%
Manufacturing Expenses	12,774	16,171	-21.0%
Manpower Cost	11,955	12,463	-4.1%
Other Expenditure	8,676	10,396	-16.5%
Total Expenditure	69,170	81,174	-14.8%
EBITDA	11,388	20,284	-43.9%
EBITDA %	**14.1%**	**20.0%**	**-**
Depreciation	5,477	5,208	5.2%
Interest	1,713	1,272	34.7%
Other Income	1,879	2,028	-7.4%
PBT	6,076	15,832	-61.6%
Exchange Gain/(Loss)	(242)	272	-
PBT	5,834	16,104	-63.8%
Exceptional Item	(789)	-	-
Share of Associate/JV's	(429)	(114)	-
PBT	4,617	15,990	-71.1%
Taxation	1,125	5,664	-
PAT	3,492	10,326	-66.2%

Analysis of Consolidated Balance Sheet Statement

(in ₹ Million)

Particulars	March 31, 2020	March 31, 2019
Long-Term Debt	23,445	19,350
Equity	52,517	54,059
Cash	20,070	18,352
Long-Term D/E	0.45	0.36
Long-Term D/E (Net)	0.06	0.02

Putting the right talent at the right place has been one of the key enablers for the Company's successful growth.

Human Resource Management

The talent pool at Bharat Forge Limited has been a key driver of its success over the past decade and continues to play an important role in achieving its vision. Human resource practices at the Company continue to evolve and align themselves with the growing business expectations. They stand firm on five pillars, which are:

Talent Development

The Company aims for holistic development of its human resources, and a part of this is building capability by imparting top-notch technical domain knowledge. It strives to enhance the engineering and technical knowledge of its employees by collaborating with premier institutions like IIT, BITs Pilani, and DIAT, among others. The knowledge is further enhanced by on-the-job trainings in the respective areas and projects. The Company has implemented unique and customized technical competency development initiatives in the forging and machining areas.

Alongside this, the Company also undertakes various leadership and managerial capability development initiatives. The Human Resource Laboratory is one of such initiative. Investments like these ensure adequate availability of leadership talent to successfully head new businesses and expansion projects, attaining strategic goals and organizational vision.

Talent Acquisition to Support Business Growth

Putting the right talent at the right place has been one of the key enablers for the Company's successful growth. It proactively provides opportunities to appropriate internal talent in various business activities, achieving business objectives and ensuring superior talent development. The process of internal hiring and job rotations has played a crucial role in the start-up phase of every new business within the Company and yielded good results over the past decade.

The Talent Pipeline program in collaboration with identified engineering institutes has provided key entry-level engineering talent, which is subsequently trained on the job to enrich the Company's technical and managerial talent pool.

Digital Workplace

The Company has focused on building a futuristic workplace where the key element is digital talent. It has been investing in developing digital talent by creating the capacity to train its engineers in digital tools and techniques. Customized capability building initiatives under Industry 4.0 have been implemented. Participants are able to apply the learnings practically at their workplace. This has helped the Company to create a smart workplace that will lead to a smart factory.

With more than 1,000 engineers equipped with Industry 4.0 skills, the Company is reaping the benefits of digital talent development in its manufacturing processes. Additionally, the Company continues to automate processes in the transactional areas of HR, enabling a superior digital experience for employees and increased administrative efficiency.

Culture of Employee Involvement

The Company implements a number of programs to improve employee engagement; these include various annual events. Employee participation in these events is extended to employees' family members, too. FY 2020 witnessed the highest ever employee participation in the Company's annual cultural program, symbolizing the growing engagement levels. To involve line managers through HR Facilitator or Talent Manager Initiative, they are entrusted with the additional responsibility of becoming the nodal point of contact for the employees in their departments and support them in all HR matters.

Harmonious Relationship with Unions

The Company has established a robust industrial relations philosophy, through which it has sustained harmonious relationships with unions across locations over the past decade. It emphasizes on the proactive involvement of workers and their representatives to ensure prompt and thorough implementation of changes across the locations. This has also enabled the Company to peacefully sign several wage settlements.

In line with the vision of the digital workplace, workers at the Mundhwa plant are trained in Industry 4.0 knowledge. This will be extended to other plants over the years. Technical training programs are regularly undertaken to improve workers' domain knowledge and skills, as per the evolving requirements. The Company partners with unions to ensure cordial and proactive industrial relations.

In line with the vision of the digital workplace, workers at the Mundhwa plant are trained in Industry 4.0 knowledge.

Industry 4.0 Training

Corporate Social Responsibility

Bharat Forge Limited follows the philosophy of 'Good Corporate Citizenship' and works to improve the quality of life of its community members. Its goal is to create a long-lasting positive impact on the community. Therefore, the Company's CSR activities have a strong element of self-sustainability, achieved by training community leaders and influencers who would provide direction once the projects started by Bharat Forge Limited are handed over to the community.

The Company has identified six key programs to achieve inclusive growth of the communities. These are:

1. Village Development

Under the Village Development program, the Company intends to uplift 100 villages by focusing on activities under 5 key pillars. Prime highlights of these pillars are:

- **Water Availability:** The Company's extensive efforts to enhance agricultural water availability and to improve access to safe drinking water are yielding good results, as can be witnessed in increased farm income and the elevated standard of living of its beneficiaries. In FY 2020, the Company constructed 10 Bandharas and conserved 101.5 crore liters of agricultural water, benefiting over 18 villages and 73,045 people, respectively.

- **Enhancing Livelihood:** The Company undertakes land-leveling activities in hilly regions to enable farming, providing livelihood and income-generating opportunities to marginalized farmers. In FY 2020, the Company through this activity achieved production worth ₹ 5.67 Lakhs and increased income of ~80 farmers by 25.65%.

- **Health and Nutrition:** With a keen focus on the health and well-being of the community, especially rural women, the Company conducts screening camps for cancer and other diseases to achieve superior and in-time diagnosis and promote preventive precautions. In FY 2020, the Company through its 'health outreach program' positively impacted the lives of 2,210 women.

- **Education:** The Company undertakes the construction and renovation of Zilla Parishad schools in different villages to enrich the learning experience of students. In FY 2020, activities under this initiative benefited 47,535 students in 134 schools.

- **Internal roads:** The Company's efforts to provide much-needed access to villages by building roads have significantly improved villagers' employability, income, and education. In FY 2020, it created livelihood opportunities for more than 11,350 villagers by constructing 53 km of roads.

2. Community Development

Under the community development program, the Company imparts various vocational trainings and skill development programs to women, along with conducting social get-togethers and providing support for small-scale businesses. This enables community women to become more self-reliant with superior emotional well-being. In FY 2020, the Company positively impacted the lives of more than 2,400 women through this program.

3. Education

The Company undertakes 'Pradnya Vikas Program' and 'Anubhav Shala – Khelghar' initiatives to impart personality and leadership skills to underprivileged

Aptitude and Creative Education under CSR initiatives children with the aim of enhancing their academic performance. Additionally, through its Pratham Pune Education Foundation (PPEF) program, it has provided basic education to over 150,000 children from the most underprivileged section of the community. These programs are designed and executed to make children more aware, confident and self-reliant by honing their communication skills and life skills.

4. **Employee Volunteerism**

   The Company's spirit of 'giving back' has permeated to its employees as well, as manifested in their active participation in various initiatives like the No-Tobacco Initiative, Traffic Volunteering Initiative, Swachha Sundar Shala (Clean Schools Initiative), 'Daan Utsav (Joy of Giving Initiative)' and training at Industrial Training Institutes (ITIs) conducted during the year. In FY 2020, the Company's employees collectively helped over 3,000 people.

5. **Skill Development**

   The Company collaborated with CII and College of Engineering, Pune, and continued supporting 90 graduate students from the rural background by providing soft skills and communication skills to enhance their employability. Bharat Forge Limited has signed an MoU with Vishwakarma Vocational Training Institute, Pune, to provide a specialist course in 'Radio Frequency and Microwave Technology' to the engineering graduates (B.E./B.Tech) and post-graduates (M.E./M. Tech) from rural backgrounds.

   For its work in the development, upgradation and skill education training at the ITIs at Khed, Bhor, and Malegaon, the Company was awarded for 'Outstanding commitment and dedicated support as the Industry Partner' by the Directorate of Vocational Education and Training and Skill Development and Entrepreneurship Department, Government of Maharashtra. The Company-supported ITI Khed also received the award for 'Best ITI' in the Pune region.

6. **Sports Development**

   The Company conducts its sports development initiatives under Project Lakshya. In FY 2020, it continued providing financial and training support to talented and promising sportspersons from across the country. The Company actively supports people in disciplines such as tennis, chess, boxing, car racing, and badminton, among others.

   The Bharat Forge CSR efforts in FY 2020 bore fruit, enhancing the lives of over 174,492 people. These efforts earned the Company the prestigious Golden Peacock Award, considered a global benchmark of corporate excellence.

Risk Management

Considering the cyclical nature of the business and especially the ongoing transformation of the global automotive industry, it is imperative to identify risks in advance and mitigate or curtail them within time. Keeping this in mind, the Company has adopted robust mechanisms and processes to identify and mitigate critical risks, to safeguard itself from the permanent capital loss and to maintain the long-term growth trajectory of the business performance. These risks may be internal as well as external in nature, and the Company has devised a robust risk management framework for a swift response and continuous monitoring.

Industry Risk

The US and European operations contribute more than 50% of the Company's total revenue. A global slowdown or continent-specific shocks such as unfavorable regulatory changes may disrupt these markets temporarily or for long durations and hence may adversely affect the Company's revenue generation capability.

Mitigation Measures

The Company has meticulously de-risked its business model by diversifying into multiple industries such as Automotive, Defence, Oil and Gas, Mining and Construction, Power, Aerospace, E-mobility, etc. Apart from industrial diversification, the Company has also diversified geographically with a global presence in 5 countries. The Company continues to evaluate and add new geographies and new customers to its portfolio. With a wider global footprint, the impact of country-specific shocks will be minimal.

Foreign Exchange Risk

With its global presence, the Company has significant foreign currency liabilities as 58% of its revenue comes from exports business. Any unfavorable movement in the exchange rates may adversely impact its profitability.

Mitigation Measures

The Company practices hedging and also enters into simple forward contracts on a rolling basis to protect itself from exchange rate fluctuations. Further, the Company

Heavy Component Machining, Baramati, India

ensures a natural hedge by maintaining its foreign currency borrowing less than its exports at any given time.

Raw Material Risk

Unavailability of the critical raw materials such as steel, aluminum, energy, etc. at competitive rates may affect the Company's smooth operation and adversely impact margins.

Mitigation Measures

Steel is the most critical raw material for the Company, the availability of which is met through a group company, thus ensuring sustained supply at competitive prices. It has also developed a patented in-house loop-based manufacturing system that ensures zero scrappage of key raw materials. Additionally, the Company practices a raw material price pass-through clause in all its contracts. These initiatives have mitigated the Company's raw material risk to a large extent.

Technology Risk

The Company operates in a highly competitive, regulated and cyclical industry. Besides global competition, the automobile industry is also undergoing a technology transformation in the form of CASE (connected, autonomous, shared and e-mobility) that poses a risk of the Company's products becoming irrelevant. Failing to align with future demands may damage the Company's global competitive position.

Mitigation Measures

The Company is embracing the transformative shifts the auto industry is undergoing and is proactively developing new growth engines. It is aligning itself to adapt to future changes and cater to emerging demands by investing in appropriate technologies and companies and thereby building capabilities and capacities to be future-ready. Internally, it continues to undertake productivity enhancement initiatives and strives to optimize its production costs by adopting Industrial Internet of Things (IIoT) and implementing Industry 4.0 across its plants.

Funding Risk

The Company's operations, entailing investments in capacity, technology and extensive R&D, are capital intensive. Unavailability of external sources of funds at competitive rates and the right time may impact its growth plans and profitability.

Mitigation Measures

With its efficient utilization of working capital and prudent capital allocation capabilities, the Company has maintained strong cash and equivalent position on the books. This, coupled with optimum use of debt, has enabled it to maintain healthy net debt to equity ratio at 0.25 as on March 31, 2020. The Company's strong business model and higher effectiveness of R&D has enabled it to generate ample free cash flows. This has successfully lowered its dependence on an external source of funding for future growth.

Manpower Risk

Talented employee pool and its retention are integral to the Company's sustainable and profitable growth. High attrition levels may affect the normal functioning of the Company and may adversely affect or prolong its growth ambitions.

Mitigation Measures

The Company has people-centric policies and promotes meritocracy across all the hierarchy. It has strong HR policies and procedures in place to maintain a motivational work environment and to minimize attrition rate. With periodical training and skill upgradation programs, the Company strives to align employee's personal goals with its professional goals. Also, the Company encourages new talent acquisition to upgrade the talent pool, and excellent employee performance is appropriately recognized.

Internal Systems and Their Adequacy

Bharat Forge Limited has in place a well-defined and adequate internal control system that authorizes, records, and reports transactions to safeguard assets and protect against loss from unauthorized use or disposition. It also ensures the reliability of recorded data and financial information to maintain accountability of assets. These internal controls are supplemented by extensive internal audits, management review and documented policies, guidelines and procedures.

Cautionary Statement

The Management Discussion and Analysis contains statements that describe the Company's objectives, projections, estimates and expectations, which maybe forward-looking in nature. These statements are made within the meaning of applicable laws and regulations and are based on informed judgments and estimates. The Company's actual performance might differ substantially or materially from projections, expressed or implied, due to various factors beyond its control. Important developments that could affect the Company's operations include a downward trend in the forging industry – global or domestic or both; significant changes in the political and economic environment in India or key markets abroad; tax laws, litigation, labor relations; exchange rate fluctuations; interest and other costs. The Company does not undertake any responsibility to update these statements.