

BSE SENSEX
37,688

S&P CNX
11,102

CMP: INR481

TP: INR460 (-5%)

Neutral



Motilal Oswal values your support in the Asiamoney Brokers Poll 2020 for India Research, Sales and Trading team. We [request your ballot](#).



Stock Info

Bloomberg	BLSTR IN
Equity Shares (m)	96
M.Cap.(INRb)/(USDb)	46.6 / 0.6
52-Week Range (INR)	887 / 425
1, 6, 12 Rel. Per (%)	-8/-32/-29
12M Avg Val (INR M)	56

Financials Snapshot (INR b)

Y/E Mar	2020	2021E	2022E
Sales	53.6	45.0	57.5
EBITDA	2.8	1.9	3.4
PAT	1.5	0.6	1.8
EBITDA (%)	5.3	4.3	6.0
EPS (INR)	15.3	6.7	18.7
EPS Gr. (%)	-21.4	-56.2	179.7
BV/Sh. (INR)	81.2	83.9	91.4

Ratios

Net D/E	0.2	0.1	0.1
RoE (%)	18.8	8.0	20.5
RoCE (%)	13.6	6.9	14.7
Payout (%)	156.2	60.0	60.0

Valuations

P/E (x)	31.8	72.6	25.9
P/BV (x)	6.0	5.8	5.3
EV/EBITDA (x)	17.1	24.8	13.8
Div Yield (%)	4.1	0.8	2.3
FCF Yield (%)	8.0	2.5	2.2

Focus on working capital management remains key

Blue Star's (BLSTR) FY20 Annual Report highlights the company's focus on improving working capital, enhancing manufacturing facilities, deepening its reach, consolidating global presence in key markets like the Middle East, and increasing R&D/ad-spends. Key insights highlighted below:

- Focus on working capital reduction leads to healthy FCF:** BLSTR was successful in reducing its working capital (WC) cycle in FY20. As % of sales, WC stood at 6.2% in F20 (v/s 10.6% in FY19) due to debtor days declining to 57 days in FY20 (v/s 78 days in FY19). Free cash flow (FCF) generated stood at INR3.7b in FY20, implying FCF/EBITDA of 131% and FCF/Adj. PAT of 252%. Over FY14-20, FCF generation stood strong at INR8.9b, implying 100% FCF/Adj. PAT.
- Consolidating global presence:** BLSTR's products are exported to 18 countries across the Middle East, Africa, SAARC and ASEAN regions. Revenues from abroad doubled to INR5.2b in FY20 (v/s INR2.6b in FY15). Also, share of revenue from abroad now constitutes ~10% of the company's total revenue (v/s 8.4% in FY14). Due to temperatures in the Middle East going up to 60°C, BLSTR with its range of cooling solutions has a plethora of opportunities in the region. Hence, the company has expanded its operations by starting a new office and inaugurating its first state-of-the-art flagship showroom in Dubai.
- Enhancing manufacturing capabilities:** To reduce dependence on imports from China, BLSTR has invested to expand its range of plastic-molding tools and hard-formed tools. This would enable backward integration for the company. Also, BLSTR has made significant upgrades to its Wada facility (it has added heater-less vaporizer machine and a *Fanuc* robot), which has led to cost savings and improvement in productivity.
- Focus on Research and Development (R&D):** In FY20, BLSTR continued to enhance its R&D activities with 35% YoY increase in spends to INR685m. R&D spends now form 1.3% of sales, up from 1% in FY19. BLSTR has already developed a 3-star inverter split AC complying to the 2021 BEE energy-efficiency norms, with an ISEER of 3.90.
- Increasing ad-spends:** Despite the muted 2.4% YoY revenue growth in FY20, advertisement expenses increased by 52% YoY as BLSTR signed on cricketer Mr. Virat Kohli as a brand ambassador for its range of Air conditioners (ACs). Ad-spends, sales incentives and promotions together formed 2.8% of FY20 sales, up from 2.3% in FY19.
- Rising distribution reach:** BLSTR has added ~720 channel partners in FY20, one of its highest additions since FY15. Total channel partners stood at ~3,880 at end-FY20 (v/s ~2,000 in FY14). This indicates the company's deeper presence across various markets. BLSTR has expanded its retail distribution reach for room air conditioners (RAC) and added ~508 retailers and distributors across India, thereby increasing its presence in Tier 2/3 markets by 10% YoY.

Nilesh Bhaiya – Research Analyst (Nilesh.Bhaiya@MotilalOswal.com)

Pratik Singh – Research Analyst (Pratik.Singh@MotilalOswal.com)

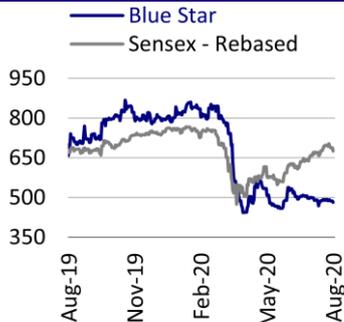
Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Shareholding pattern (%)

As On	Jun-20	Mar-20	Jun-19
Promoter	38.8	38.8	38.8
DII	23.0	22.8	19.5
FII	8.8	8.8	10.9
Others	29.5	29.6	30.8

FII Includes depository receipts

Stock Performance (1-year)

- **FY20 performance highlights:** FY20 revenue grew 2.4% YoY while Adj. PAT declined 21.4% YoY. The company reported 18.4% decline at EBITDA level. The company is maintaining high liquidity due to the disruption in operations during Mar'20. While gross debt has increased by INR1b to INR4.5b, Net debt has reduced to INR1.6b in FY20 (v/s INR2.4b YoY).
- **Key segment highlights (FY20):** (a) EMP & CAS segment – Revenue stood at INR28.3b, up ~3% YoY. EBIT margin stood at 4.3% (down 120bp YoY). (b) Unitary Product segment – Revenue stood at INR23b (+1.4% YoY), while EBIT margins declined 110bp YoY to 7.1%.
- **Valuation and view:** Over FY20-22E, we expect revenue/EBITDA/PAT to grow 3.6%/10.3%/10.7%. FY21E is expected to be a washout year. However, we note that margin volatility in the case of BLSTR poses a challenge to our earnings forecast, thereby leading to sharp earnings downgrade. Our SOTP-based TP stands at INR460/share and we maintain **Neutral**. We prefer **Voltas** over **BLSTR** to play the underpenetrated AC market in India.

Story in charts

Exhibit 1: FY20 revenue break-up

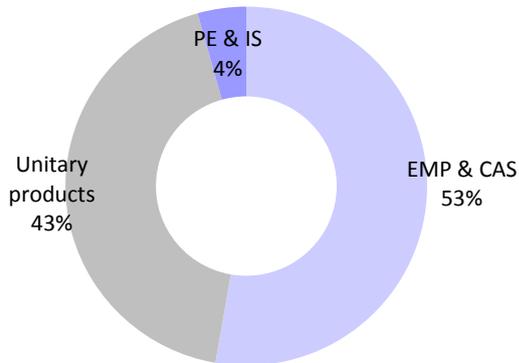


Exhibit 2: FY20-22E CAGR estimates by category

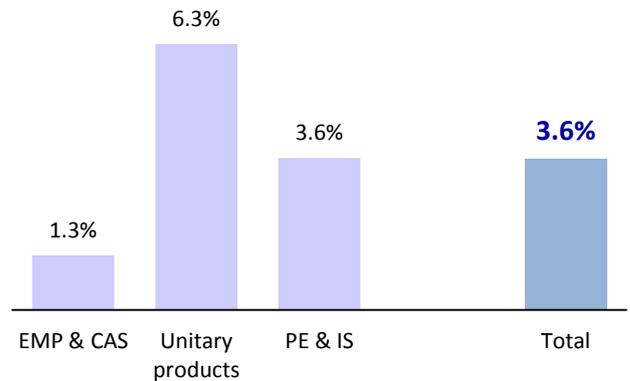


Exhibit 3: Expect Unitary Products' revenue CAGR of 6.3% over FY20-22E

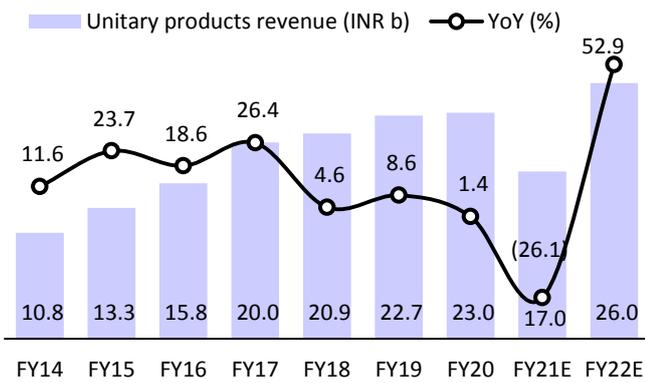


Exhibit 4: Unitary Products' margin to scale up by 40bp over FY20-22E

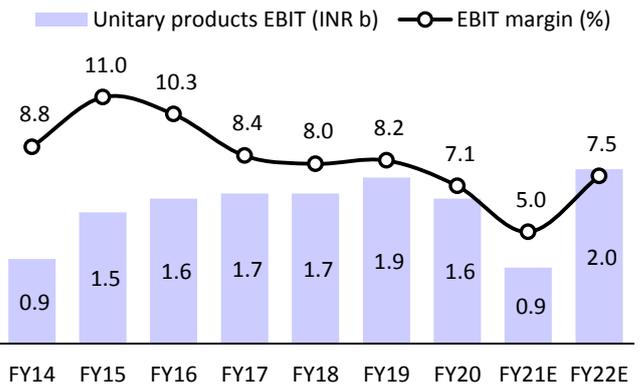


Exhibit 5: EMP & CAS revenue CAGR of 1.3% over FY20-22E

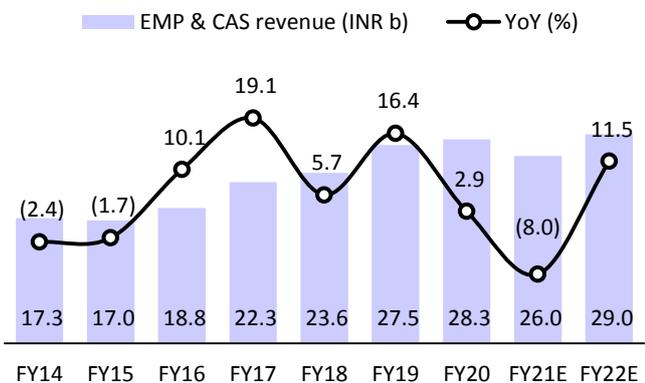


Exhibit 6: EMP & CAS margins to bounce back in FY22E

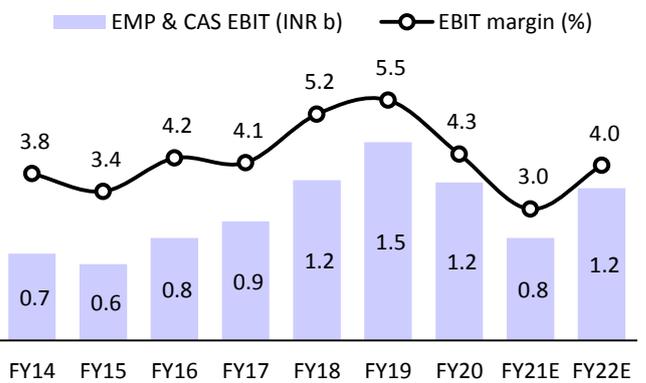
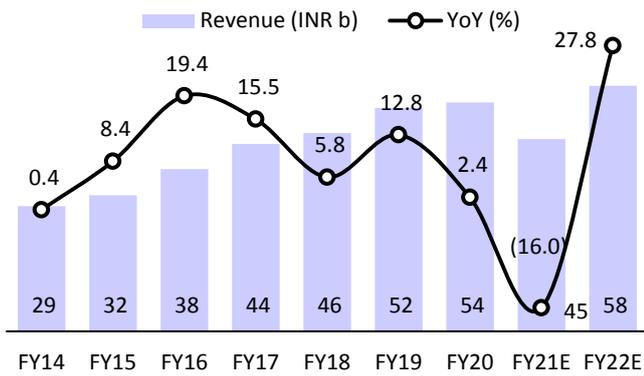
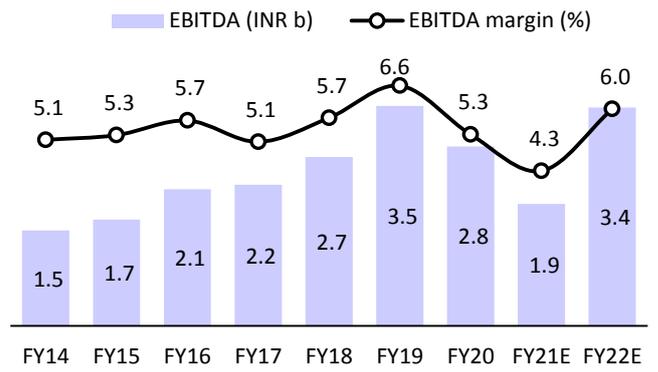


Exhibit 7: Expect revenue CAGR of 3.6% over FY20-22E



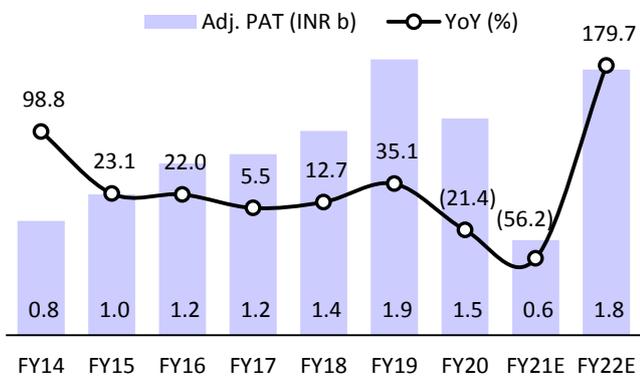
Source: MOFSL, Company

Exhibit 8: EBITDA margin to expand 70bp over FY20-22E



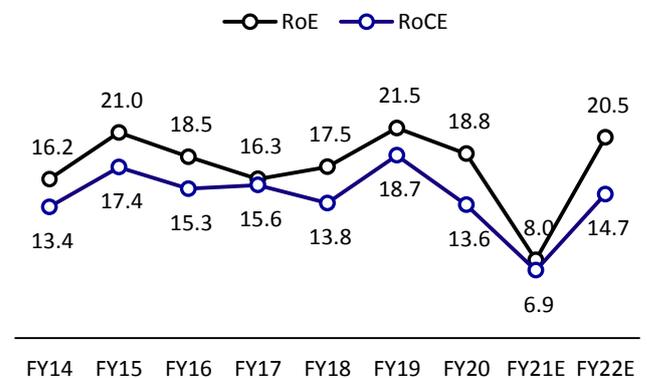
Source: MOFSL, Company

Exhibit 9: Adj. PAT CAGR expected at 10.7% over FY20-22E, partly due to reduction in tax rates



Source: MOFSL, Company

Exhibit 10: Return ratios to remain healthy over FY20-22E after a blip in FY21E



Source: MOFSL, Company

Management discussion and analysis – Key takeaways

#1: Consolidating global presence

- BLSTR has continued its steady growth in global markets. Its products are exported to 18 countries spread across the Middle East, Africa, SAARC and ASEAN regions. BLSTR’s 100% subsidiary, Blue Star International FZCO, headquartered at Dubai Airport (Free Zone), manages its international business as well as joint ventures (JVs), which focus on HVAC&R, in addition to MEP projects for residential, commercial and industrial segments.
- Blue Star International FZCO handles export of air conditioning and commercial refrigeration products. It also manages the Original Equipment Manufacturing (OEM) / Original Design Manufacturing (ODM) businesses for globally recognized brands such as Danfoss and Rheem.
- To expand its operations in the Middle East, BLSTR started a new office and inaugurated its first state-of-the-art flagship showroom in Dubai. The Middle East has always been a promising market for BLSTR. Due to temperatures in the region soaring upto 60°C, it augurs well for BLSTR’s range of cooling products.
- **BLSTR’s overhead unique tank chillers used in commercial/residential space are in high demand across the Gulf Cooperation Council (GCC) market due to the high prevailing temperatures in the region.** The company’s eco-friendly inverter split ACs with zero-ozone depletion R32 refrigerant are also well accepted in the Maldives and Sri Lankan markets.
- In FY20, BLSTR’s some projects under execution include the Qatar University and other multi-storeyed buildings (Qatar), and the Cyberjaya Hospital, Bukit Jalil Mall and BB Tower (Malaysia).
- Though still a small proportion to overall sales (9.7% in FY20), BLSTR’s revenue outside India has doubled over FY15-20.

Exhibit 11: Revenue outside India has doubled over FY15-20, though growth in FY20 was muted at ~3% YoY

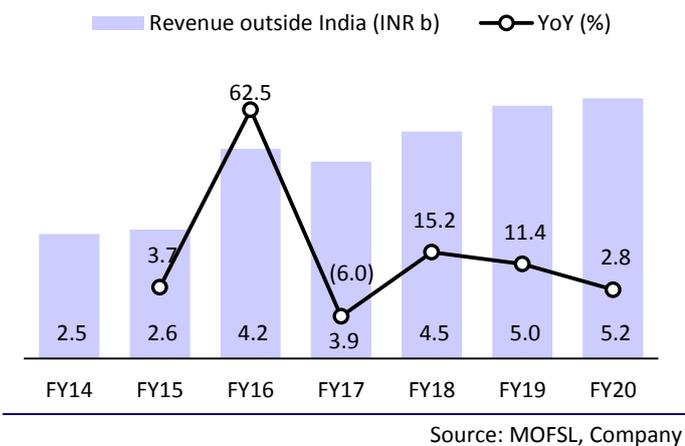


Exhibit 12: Share of revenue (%) outside India has ranged between ~8-10% over FY14-20

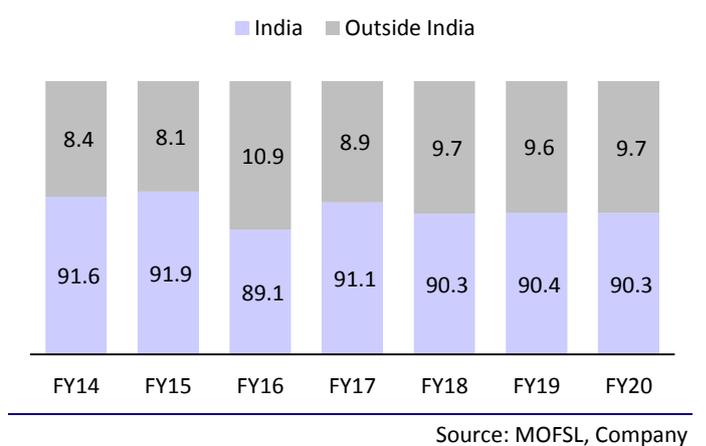


Exhibit 13: Construction of the district cooling plant, civil and MEP works of Qatar University project



Source: MOFSL, Company

Exhibit 14: BLSTR service vehicle/showroom in the UAE



Source: MOFSL, Company

#2: Enhancing manufacturing capabilities

- BLSTR's manufacturing footprint spans five state-of-the-art facilities across Wada, Dadra, Himachal Pradesh and Ahmedabad, which are dedicated to various product lines.
- BLSTR has now embarked on a manufacturing transformation project titled 'Qualis 2.0' with a focus on supplier excellence, end-to-end logistics, Industry 4.0 practices and building new-age competencies in people.
- As part of its strategic initiatives, the company has invested in expanding its range of plastic-molding and hard-formed tools. This would enable backward integration for the company.
- BLSTR is in the process of setting up an additional facility to expand its manufactured commercial refrigeration range of products. To achieve this end, it is **using some of the latest techniques such as virtual factory simulation, 3D modeling**, etc., at its existing manufacturing plant in Wada. The same should be operational by FY22E.
- Robotic interventions are being successfully used for automation of sheet loading and unloading on Amada machine to optimize manpower.
- Its Dadra Plant, which boasts of state-of-the-art testing facility, enjoys the reputation of being one of the top manufacturing facilities in India for high-quality air conditioning products. The facility manufactures packaged/ducted split ACs and VRF systems.
- BLSTR's two plants in Himachal Pradesh continue to cater efficiently to the fast growing markets of RACs and refrigeration products, and had an impressive performance during FY20. BLSTR continued to unlock enhanced value through vertical integration with in-house design and manufacture of key components such as drives, headers and strainers. A new 5mm copper coil line with a new auto brazing machine was added at the plant to keep pace with emerging trends in technology and quality upgrades.

Exhibit 15: Auto panel bender installed in FY19 led to productivity gains in FY20



Source: MOFSL, Company

Exhibit 16: 5mm fin pressing machine installed at the AC manufacturing set-up



Source: MOFSL, Company

- The Wada Plant, which is the company's largest manufacturing facility in terms of built-up area, produces a wide range of products such as scroll chillers, screw chillers, cold room panels, condensers/evaporators for the cold room business and condensing units for an overseas OEM.
- The heater-less vaporiser machine installed at the Wada Plant, which has replaced the 36kW electrical heater-base vaporiser, has **achieved energy savings of INR5.1lac per annum with a payback of 14 months.**
- Exhibit 18 shows a *Fanuc* robot installed at the Wada Plant on the Amada Turret punching machine for sheet metal 'Pick and Place' process. It has a 165kg payload capacity. **The robot has eliminated human fatigue and increased machine utilization by 15%.**

Exhibit 17: Heater-less vaporizer machine at Wada plant



Source: MOFSL, Company

Exhibit 18: Fanuc robot at Wada plant



Source: MOFSL, Company

#3: Focus on Research and Development

- BLSTR R&D team has over 135 employees, best-in-class infrastructure including performance test labs, reliability testing facilities, electronics lab, design studio, high-end workstations for CAD and analysis, amongst others. With many patents to its credit, including the four won during FY20, the company prides itself on having one of the best R&D centres in the Indian HVAC industry.
- During FY20, Air-Conditioning, Heating and Refrigeration Institute (AHRI)-certified a configured series of air-cooled VFD screw chillers and inverter series of scroll chillers were introduced, which have significantly enhanced the company's market share in the chiller segment. This comprehensive range of

products meets the 3, 4 and 5-star energy efficiency levels as per the voluntary labeling program launched by BEE.

- A complete range of 3/5-star RACs with specific focus on the cost-competitive Inverter model series was launched in FY20.
- The side discharge range of VRF series up to 16 HP was indigenized to ensure cost competitiveness. This would help BLSTR enhance its market share in the VRF segment.
- Water purifiers with state-of-the-art filtration system and process delivering alkaline water with added minerals were well accepted in the market, creating a niche for BLSTR.

Exhibit 19: RACs undergoing endurance testing



Source: MOFSL, Company

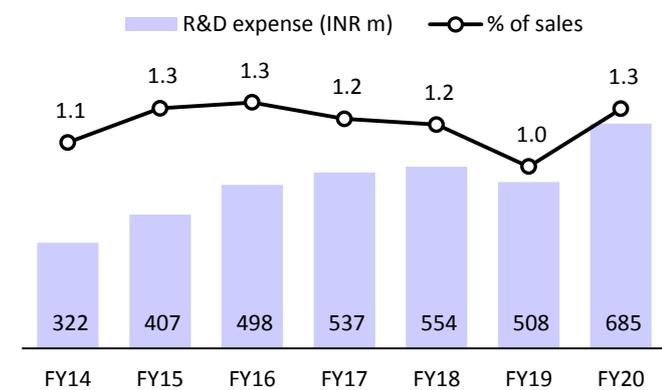
Exhibit 20: Ongoing water Ingress Protection (IP) test



Source: MOFSL, Company

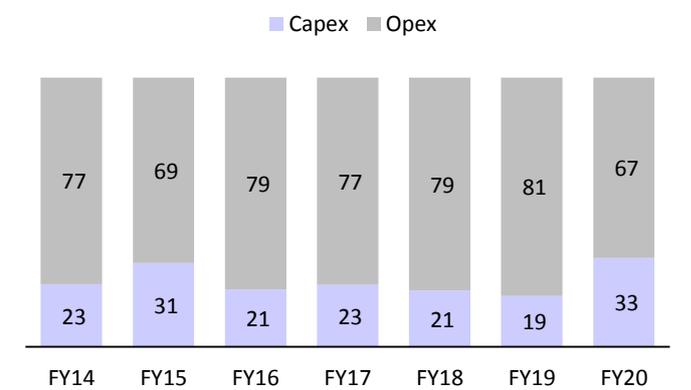
- R&D expenses have been largely range-bound between ~1-1.3% as a % of sales. In **FY20, R&D expenses increased 35% YoY to INR685m. However, it rose to just 1.3% of sales (v/s 1% in FY19).**
- FY20 also saw share of capex led R&D spends inch higher as a proportion of total spends, with BLSTR investing in new machines and facilities in FY20.

Exhibit 21: R&D expenditure increased 35% YoY in FY20



Source: MOFSL, Company

Exhibit 22: FY20 saw increase in share of capex spend (%) towards R&D



Source: MOFSL, Company

#4: Increasing supply chain effort and reach

- In FY20, the supply chain function worked on areas like lead time reduction, working capital management and expanding supplier base in FTA countries.
- The supply chain function also focused on the risk framework and worked on mitigation of risks, such as heavy dependence on one sourcing partner. It also initiated steps to de-risk its dependence on China.
- The localization of indoor units, inverter ACs and drives was a great step forward toward mitigation of risks.
- The ‘Supplier Excellence’ program, which was launched in FY19 progressed well during FY20. Currently, 50 suppliers are deploying BLSTR’s best practices in order to upgrade the overall quality of products/components.
- The Channel Management Centre, which is the overall custodian of BLSTR’s channel partners and a single point of contact for all channel administration, development and conflict resolution initiatives, **added ~720 channel partners and service associates during FY20.**
- Under the framework of its ‘Service Excellence’ program, its service reach has improved significantly to 3,946 talukas/tehsils with a new assured service response time of 3 hours and a turnaround time of 18 hours.
- BLSTR has expanded its retail distribution reach for RACs and added ~508 retailers and distributors across the country, thereby **increasing its presence in Tier 2/3 markets by 10% YoY.**
- **Currently, BLSTR has 3,880 channel partners** with over 6,000 stores for RACs, packaged ACs, chillers, cold rooms, and refrigeration products and systems, as well as 1,060 service associates reaching out to customers in over 900 towns.

Exhibit 23: Refrigerated service van



Source: MOFSL, Company

Exhibit 24: VRF commissioning van



Source: MOFSL, Company

Exhibit 25: Total channel partners have steadily risen...

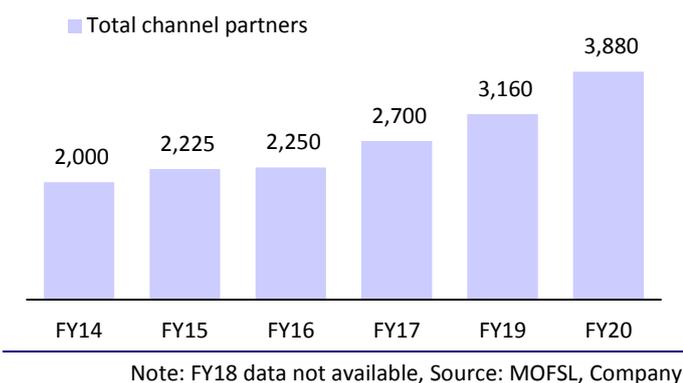
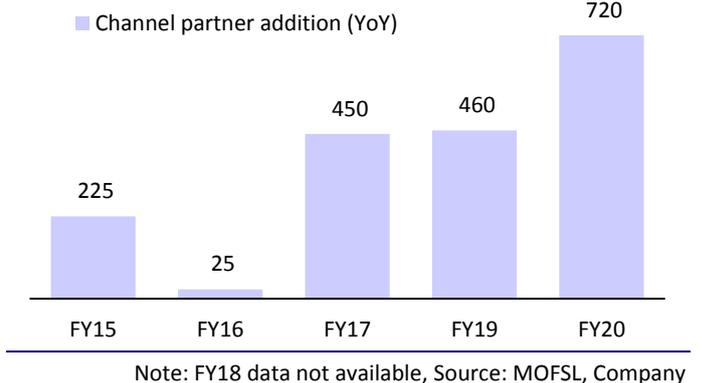


Exhibit 26: ...with FY20 witnessing highest addition

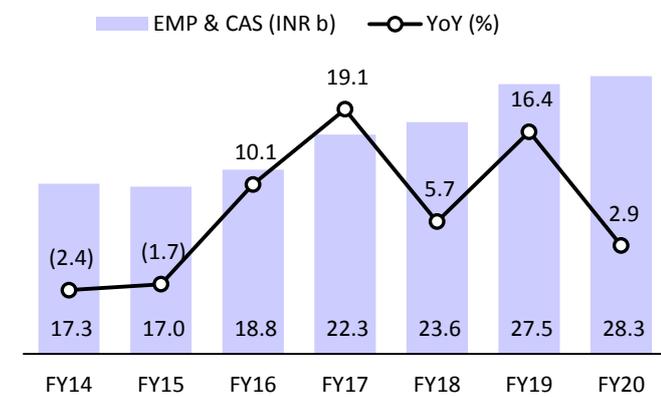


#5: Segmental performance

(A) Electro-Mechanical Projects (EMP) and Commercial Air Conditioning Systems (CAS)

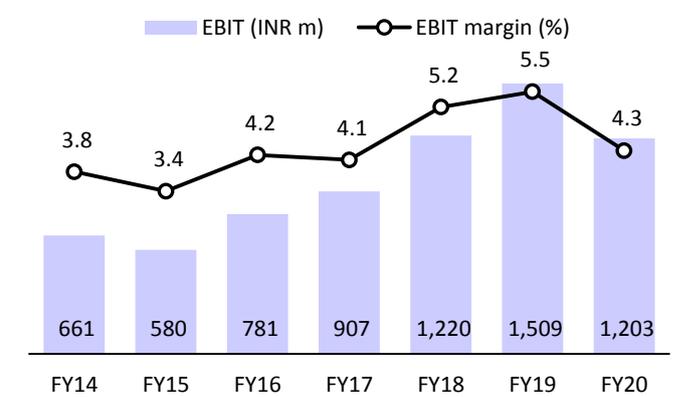
- EMP and CAS segment saw modest growth of 3% YoY in FY20 at INR28.3b.
- **Electro-Mechanical Projects:** In this sub segment, revenue was mainly driven by buildings and factories, infrastructure, and industrial segments. BLSTR has bagged a significant order from Mumbai Metro. L&T has also awarded the company with prestigious orders for major airports at Delhi, Bengaluru and Chennai.
- For FY20, more than 40% were multi-service orders as BLSTR is a significant player in the industry in this category.
- Order inflows in 2HFY20 were impacted due to challenges in the flow of credit to the Construction and Infrastructure sectors and slowdown in new projects due to business disruption caused by the spread of COVID-19.
- **Commercial Air Conditioning:** This sub segment grew faster than the market and improved its market share across product categories, aided by new product launches and increased operational reach in tier 3/5 cities. Newly launched products such as the next-generation inverter ducted, water-cooled VRF, air-cooled VFD screw chiller and configured oil-free chiller gained good traction and market acceptance.
- The market share of VRF systems stood at 18% and that of screw chillers at 15%. With 45% market share in the duct-system category and 40% market share in the scroll-chillers' category, BLSTR has maintained its market leadership position.
- **International business:** During FY20, BLSTR's JV in Qatar executed the prestigious Chilled-Water Supply Unit project at Qatar University. Profitability of its JV in Malaysia was moderately impacted due to the challenging economic conditions.
- Owing to lower operating leverage in Mar'20, EBIT margin declined by 120bp to 4.3% in FY20. Additionally, taking into consideration the outlook for commercial real estate and infrastructure sectors, BLSTR made additional provisions for potential doubtful receivables on a prudent basis.

Exhibit 27: EMP & CAS delivered revenue CAGR of 8.5% over FY14-20



Source: MOFSL, Company

Exhibit 28: Profitability declined in FY20 after rising over FY14-19

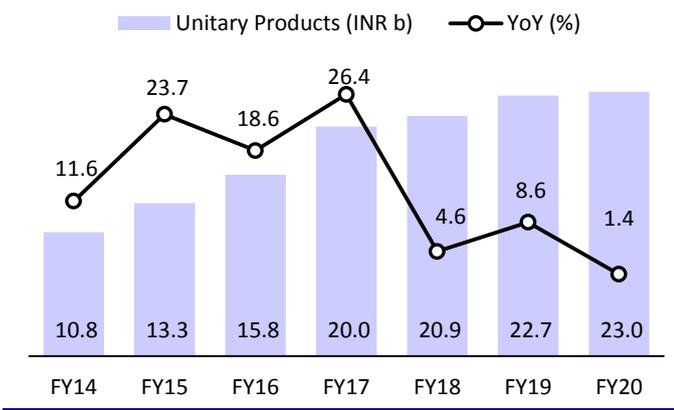


Source: MOFSL, Company

(B) Unitary Products

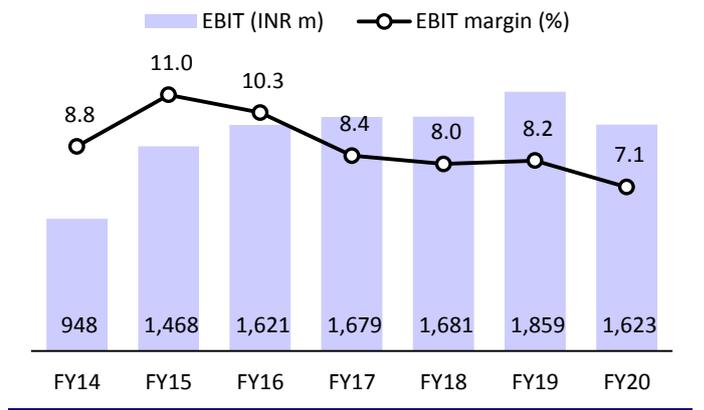
- Revenues in this segment grew modestly at 1.4% YoY to INR23b in FY20.
- RAC business grew well during 1HFY20 led by a strong summer; however, Mar’20 (a key month for peak season sales) saw lower off-take due to COVID-led disruption.
- The affordable premium range of products introduced during FY20 did well and contributed to the significant growth in split AC sales. There was increased demand from tier 3/4/5 cities. BLSTR improved its split AC market share marginally to 12.5% (by value) in FY20 (v/s 9.5% in FY15).
- In the Commercial Refrigeration Products’ business, BLSTR maintained its leadership position and grew well in the deep-freezer and water-cooler businesses. It also gained market share in bottled water dispensers. Adjacencies such as supermarket refrigeration and medical refrigeration also gained traction.
- The company also gained reasonable foothold in its newly launched water purifier business with 2% market share in FY20.
- Profitability was lower in FY20 owing to loss of AC sales in the peak month of Mar’20, coupled with higher spending on advertising and in-store presence in the modern trade to support growth in 2019.

Exhibit 29: Unitary product revenue has grown at a CAGR of 13.5% over FY14-FY20



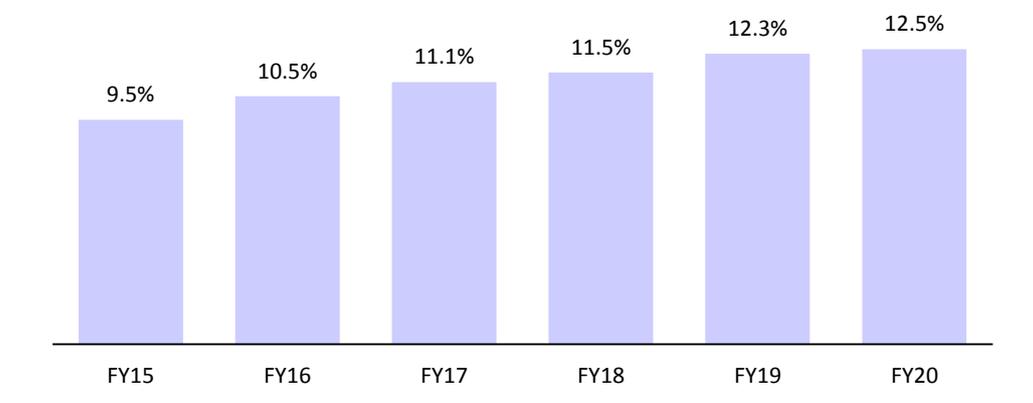
Source: MOFSL, Company

Exhibit 30: Profitability in FY20 was affected owing to COVID -19 led disruption in Mar’20 and higher ad-spends



Source: MOFSL, Company

Exhibit 31: Market share in the RAC business



Source: MOFSL, Company

(C) Professional Electronics and Industrial Systems (PE&IS)

- The PE&IS segment is operated by Blue Star Engineering & Electronics Limited, a wholly-owned subsidiary of BLSTR.
- PE&IS recorded 7% YoY revenue growth at INR2.3b in FY20.
- Growth was aided by regulatory requirements of data localisation and increased thrust on digital payment solutions, creating good opportunities for the Data Security Solutions business.
- The Government’s programs for affordable healthcare created good opportunities for the Healthcare business.
- The Communication Systems’ business that deals with radio frequency, microwave as well as avionics test and measuring equipment, secured few orders from the Defense, Space and Aerospace sectors.
- Research centers and agricultural universities continued to place orders for a wide range of inspection equipment including universal testing machines and customized plant growth chambers enabling the Testing Machines’ business to clock good performance through the year.
- The Non-Destructive Testing Systems and Industrial Automation business augmented its automation offerings and booked substantial orders from Steel and Automotive segments. The Non-Destructive Testing Products’ business has a highly diversified portfolio, which includes technologies such as Ultrasound, Eddy-Current, RVI, X-ray, Industrial CT, Radioscopy, Portable Radiography and Metrology. It has secured orders from the Automotive, Aerospace and Inspection sectors.
- Despite the slowdown, the Industrial Products business, which mainly deals in industrial valves and filters, was able to sustain itself by securing orders from the Oil & Gas industry.
- EBIT margin expanded by 320bp to 23.3% in FY20, as BLSTR slowly realigned its business model from being an exclusive distributor to a value-added re-seller, thus moving up in the value chain.

Exhibit 32: PE & IS revenue CAGR at 11.1% over FY14-20

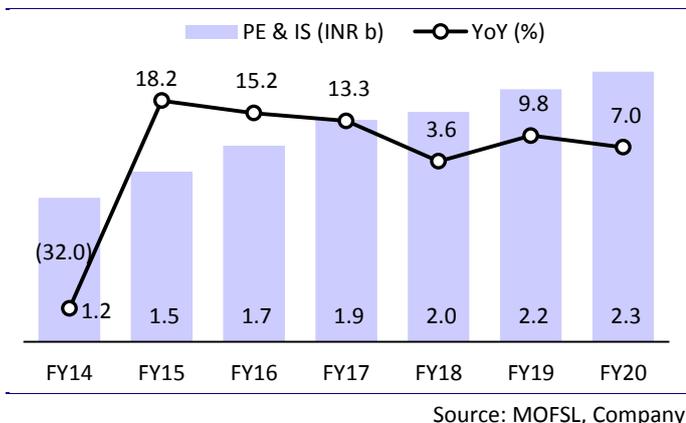
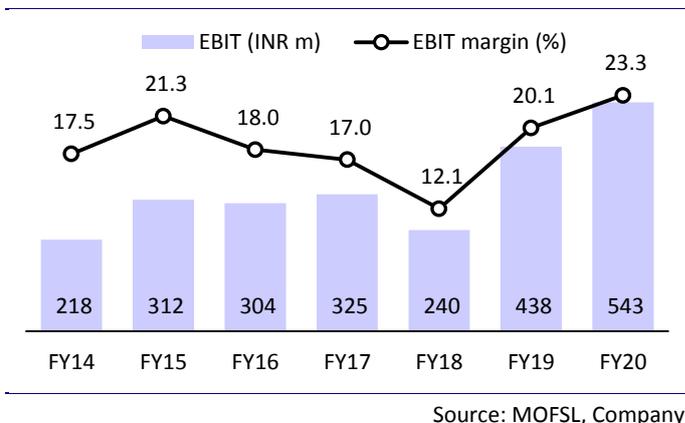


Exhibit 33: Profitability improved significantly after a slump in FY17



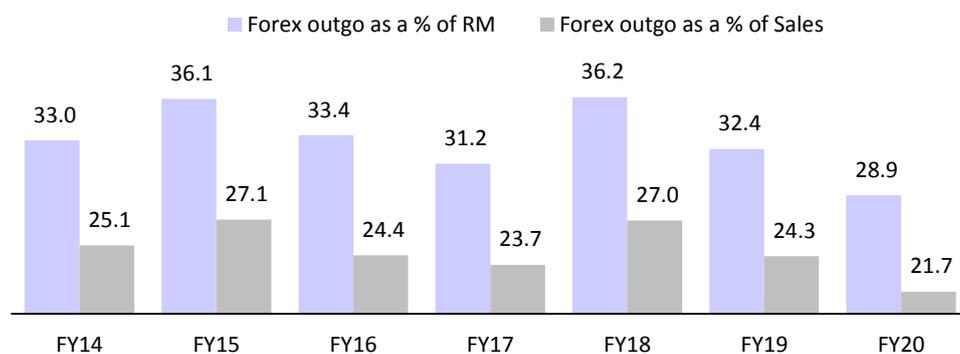
#6: Other key takeaways:**Forex earnings and outgo:**

- Forex outgo has considerably increased from INR7.4b in FY14 to INR11.6b in FY20. Forex earnings have largely remained flat at INR1.8b over FY14-FY20.
- Hence, Net forex outgo increased from INR5.6b in FY14 to INR9.8b in FY20.
- However, rising indigenization has led to a decline in the forex outgo as a % of raw material cost.

Exhibit 34: Forex earnings and outgo trend

(INR m)	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Forex outgo	7,373	8,611	9,255	10,379	12,521	12,721	11,606
Forex earned	1,814	1,972	3,491	2,566	2,637	2,270	1,813
Net forex outgo	5,558	6,640	5,764	7,812	9,885	10,450	9,793

Source: MOFSL, Company

Exhibit 35: Forex outgo as % of sales and raw material has declined over FY14-FY20, indicating lower risk

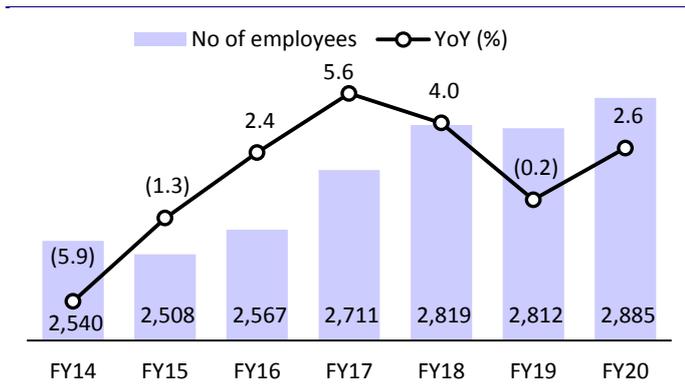
Source: MOFSL, Company

E-Commerce:

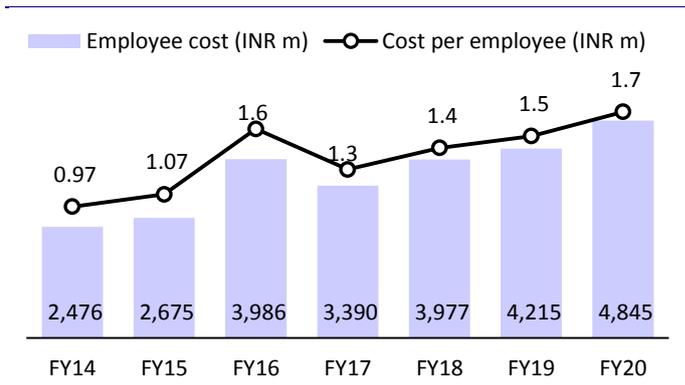
- BLSTR has not only partnered with reputed online distributors but has also become a preferred seller for Flipkart and Amazon. In addition, the company has also deployed direct seller and dropship models.
- **While the current contribution of BLSTR's unitary product from e-commerce to overall sales is less than 5%, it is likely to grow to over 20% by FY24E.**
- **Online sales of RACs/water purifiers in FY20 grew 63%/42%** over the previous year. Also, strong sales traction has started for air purifiers and deep freezers. Investments in e-commerce marketing with sponsored listings and advertisements across platforms created immense brand visibility and resulted in high conversions.
- During the year, a new Digital Asset Management system was deployed for all the cooling and purification products, which is now a strong product information and digital asset repository, widely used by various internal stakeholders.

Employees

- Number of employees at end-FY20 stood at 2,885, up 2.6% YoY.
- Per employee cost increased 12% YoY in FY20.

Exhibit 36: Steady growth in number of employees over FY15-20

Source: MOFSL, Company

Exhibit 37: Per employee cost has steadily increased over FY17-20

Source: MOFSL, Company

Remuneration

- Adj.Net profits were down 21% in FY20. Senior management remuneration declined 41% YoY for the Vice Chairman and Managing Director and 3% YoY for the Managing Director.

Exhibit 38: Management compensation

Name	Designation	FY19 (INR m)	FY20 (INR m)	YoY (%)
Vir S Advani	Vice Chairman & MD	85	50	(41)
B Thiagarajan	Managing Director	54	52	(3)

Source: Company, MOFSL

Financial analysis

Revenue analysis

- Revenue CAGR of 11% over FY14-20:** BLSTR's revenue growth was marginal at 2.4% in FY20, with all three segments growing in single digits. EMP and CAS grew ~3% YoY, with growth slowing down in 4QFY20 owing to subdued economic conditions and the COVID led shutdown. Unitary products' revenues were a strong 9% YoY until 9MFY20, but loss of peak season sales in Mar'20 led to FY20 growth of 1.4% YoY. PE&IS segment revenue grew 7% YoY led by healthy demand from the Professional Electronics segment.

Exhibit 39: EMP & CAS revenue trend

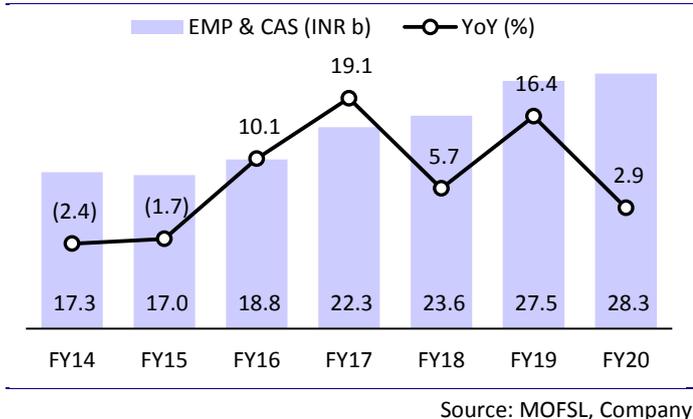


Exhibit 40: Unitary products' revenue trend

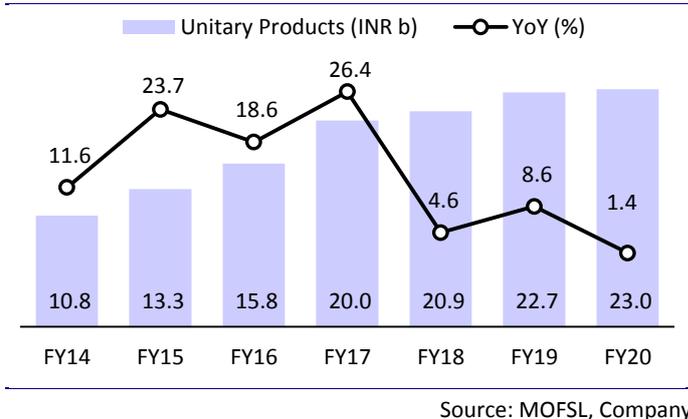


Exhibit 41: PE & IS revenue trend

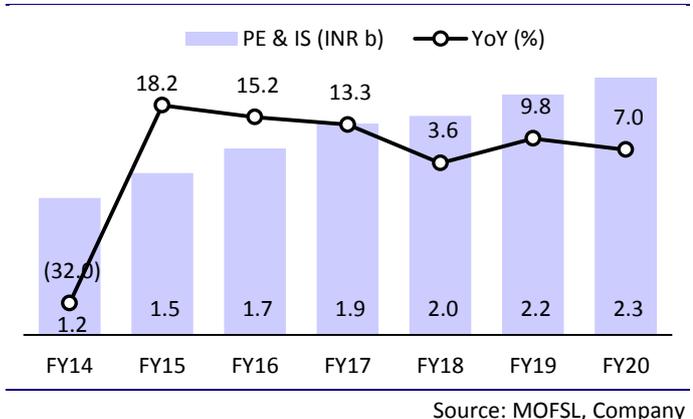
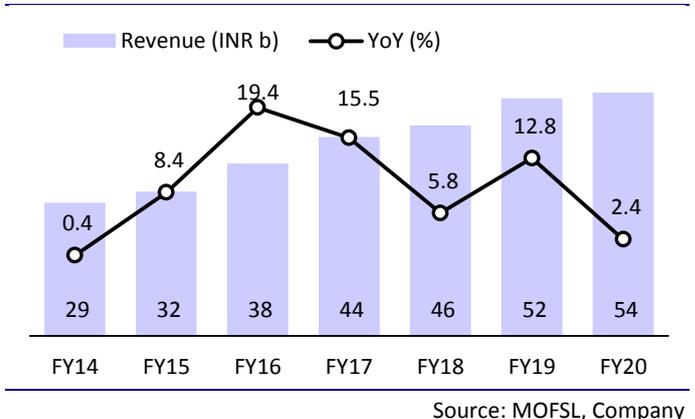
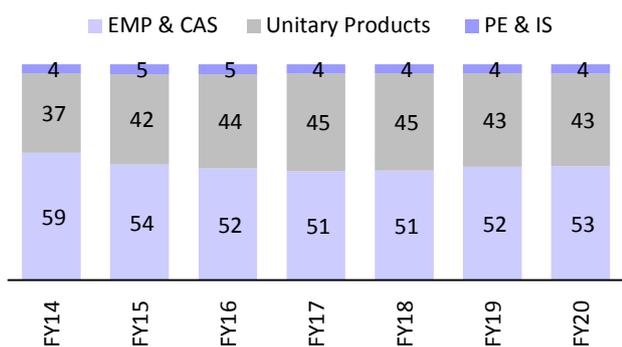


Exhibit 42: Overall revenue trend



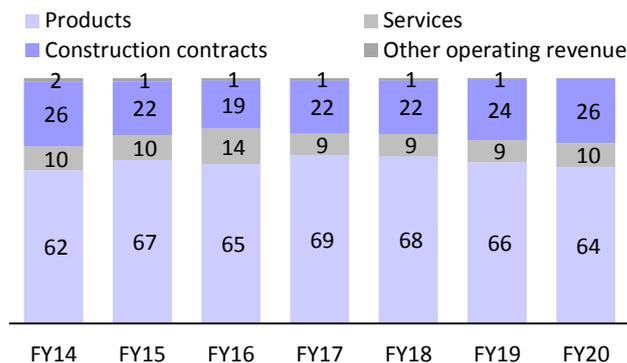
- Decline in share of EMP & CAS revenue; revenue from product sales – the mainstay:** Share of EMP and CAS revenue has declined from 59% in FY14 to 53% in FY20, while unitary products revenue has increased from 37% in FY14 to 43% in FY20. In terms of revenue break-up, revenue from products has been the mainstay for BLSTR with 64% share in FY20's total revenue. Share from construction contracts has largely remained constant at 26% over FY14-20. Share of revenue from services has also remained constant at ~10% over FY14-20.

Exhibit 43: Segment-wise share of revenue



Source: MOFSL, Company

Exhibit 44: Revenue break-up

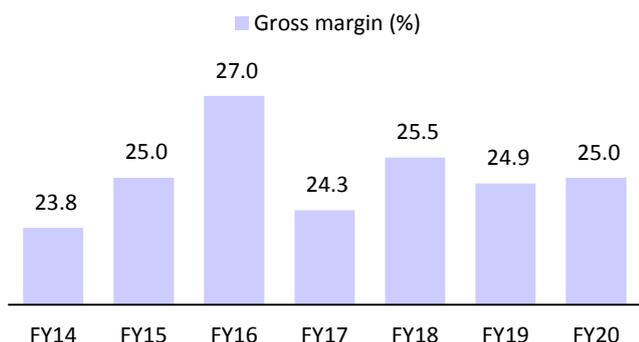


Source: MOFSL, Company

Gross margin analysis

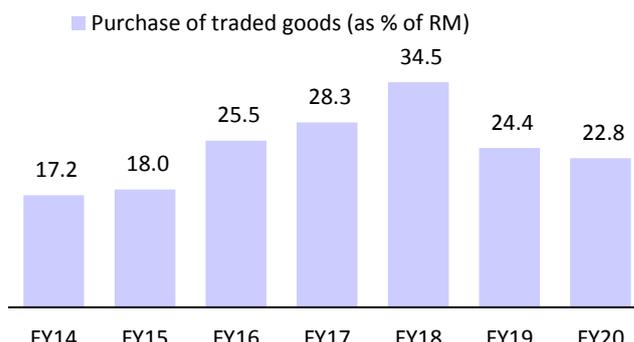
- Gross margin has remained stable at ~25% over FY19-20, expanding by 120bp over FY14-20.
- Purchase of traded goods as a percentage of total RM cost increased over FY16-18, but rising backward integration has led to a decline over FY19-20.

Exhibit 45: Stable Gross margin at ~25% over FY18-20



Source: MOFSL, Company

Exhibit 46: Purchase of traded goods has steadily declined in FY19-20 and now forms ~23% of total RM cost

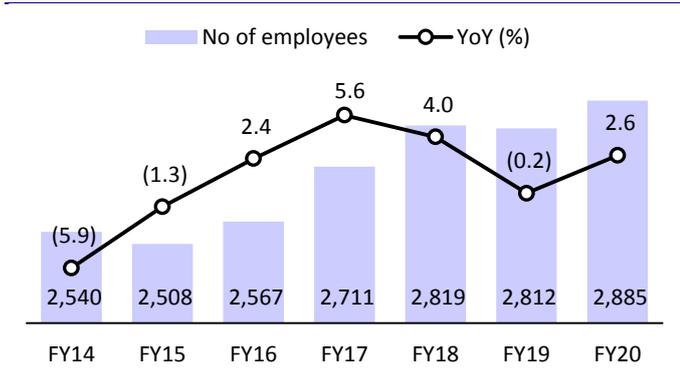


Source: MOFSL, Company

Employee cost analysis

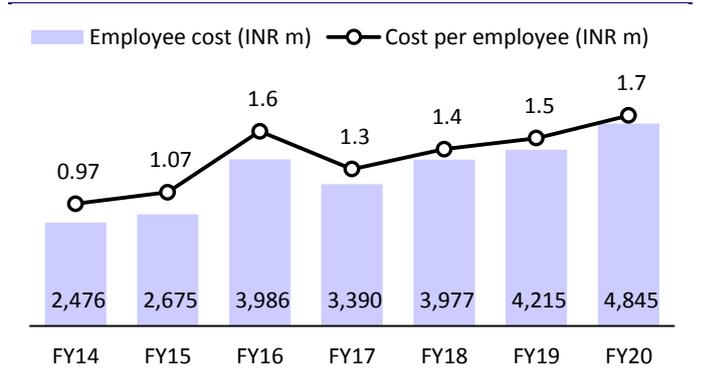
- The number of employees has marginally increased at 2.6% YoY. Staff cost has risen 15% YoY in FY20.
- Implied per employee cost has been increasing steadily since FY17 with 12% YoY increase seen in FY20. Employee costs have moderated after sale of IT business in 2016.

Exhibit 47: Increase in number of employees has been steady over FY15-20



Source: MOFSL, Company

Exhibit 48: Per employee cost showed an upward trend over FY17-20

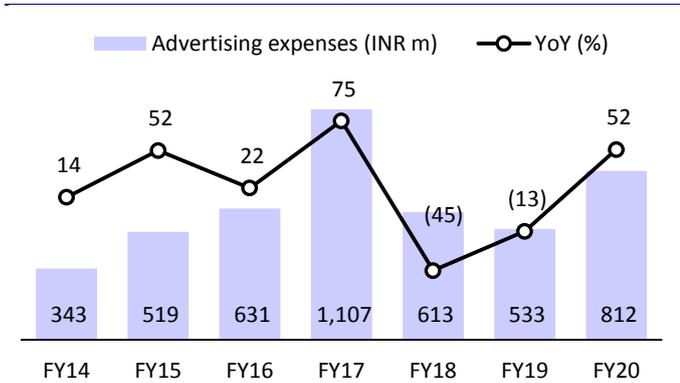


Source: MOFSL, Company

Analysis of other expenses

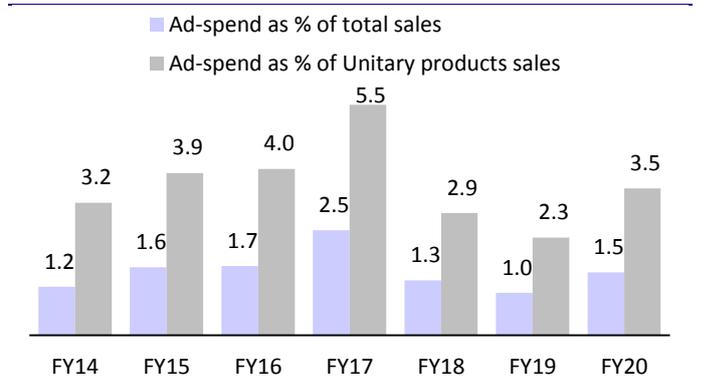
- Ad spends:** BLSTR has been prudent with its ad spends. Its ad spends-to-sales ranged between 1–1.5% of sales over FY14-20 (FY17 was an exceptional year). Despite almost flat sales in FY20, advertisement expenses increased 52% YoY during the year as BLSTR signed on cricketer Mr. Virat Kohli as a brand ambassador for its range of ACs. Ad-spends as % of sales stood at 1.5% in FY20, up from 1% in FY19.
- Ad-spends as % of unitary products sales have ranged between ~3-4% (except in FY17). FY20 showed steep rise at 3.5% of sales (v/s 2.3% in FY19).
- Overall, ad-spends, sales incentives and promotion activities ranged between ~2-3% of overall sales, with FY17 being an exception.

Exhibit 49: Trend of advertising expenses

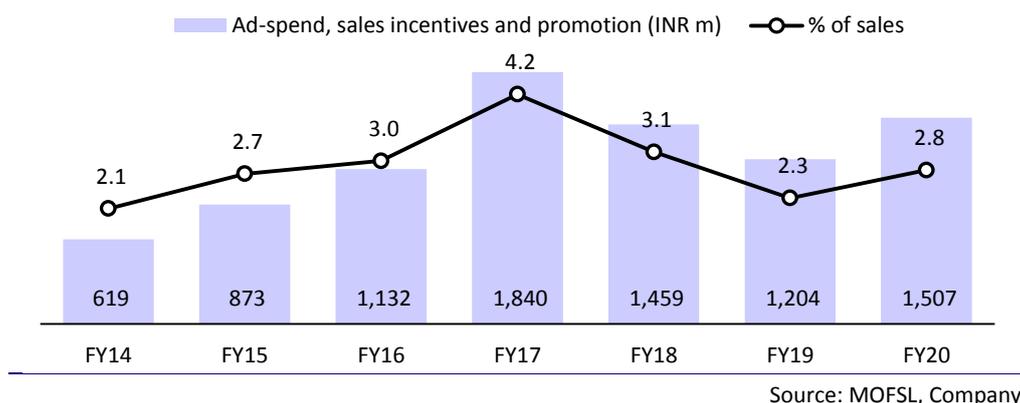


Source: MOFSL, Company

Exhibit 50: Ad-spends as % of total/unitary products sales

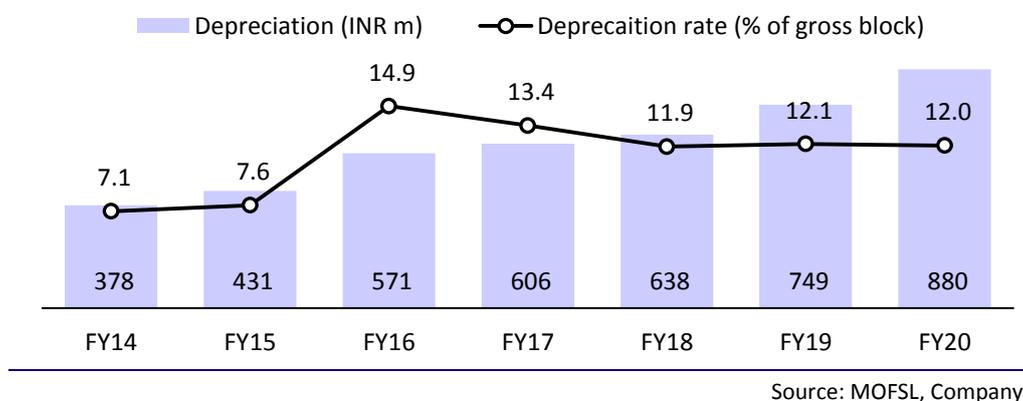


Source: MOFSL, Company

Exhibit 51: Ad-spends, sales incentives and promotion trend

Depreciation

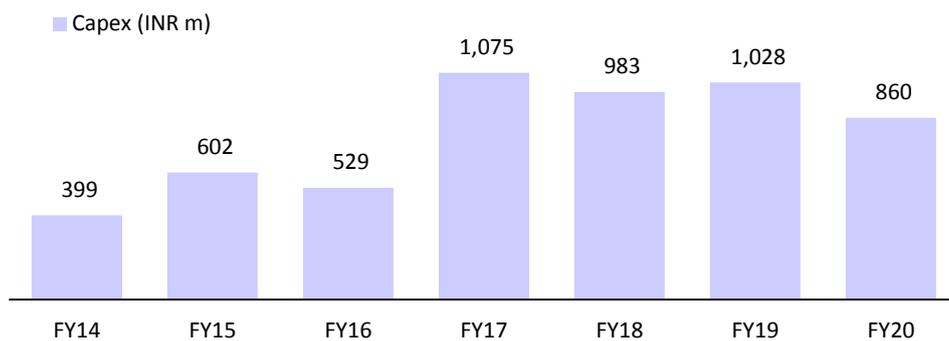
- Depreciation rate stood at ~12% over FY18-20, with no appreciable increase in FY20 despite the company adopting Ind-AS 116 (where lease rent on right to use assets has to be classified as depreciation).
- Increase in depreciation over the last two years was largely due to various capacity enhancement projects.
- Rise in rate of depreciation from FY16 was owing to adoption of Ind-AS accounting norms.

Exhibit 52: Depreciation rate broadly at ~12% over FY18-20

Capex trend

- Under the 'Manufacturing Footprint Redesign' program introduced in FY17, BLSTR's target was to enhance production capacity. The company has enabled various capacity additions over FY17-20.
- BLSTR is in the process of setting up an additional facility to expand its manufactured commercial refrigeration range of products. For this, it would use some of the latest techniques such as virtual factory simulation and 3D modelling at its existing manufacturing plant in Wada. The same is expected to get operational by FY22E.
- Capex in FY20 stood at INR860m, lower than INR1b in FY19. Capex has been in the range of ~INR900m-INR1b over FY17-FY20.

Exhibit 53: Capex has increased from FY17 onwards due to ongoing capacity additions

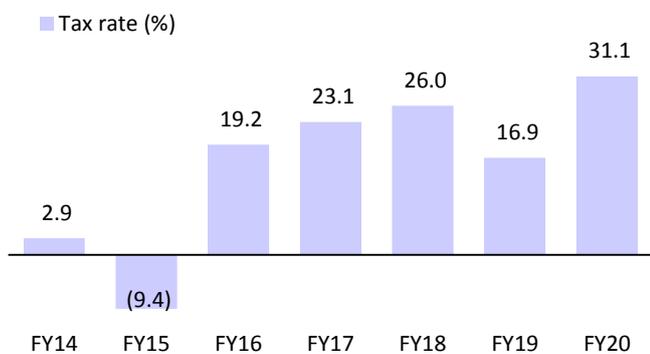


Source: MOFSL, Company

Migration to new tax rate in FY21

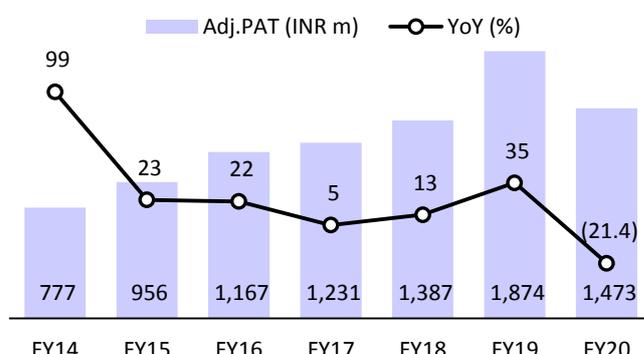
- Write-back of deferred tax assets in FY20 led to higher effective tax rate at 31% (v/s ~17% in FY19).
- The tax write-back was mainly on account of its subsidiary Blue Star Engineering & Electronics Limited. The company is expected to migrate to the new tax rate from FY21E.
- Lower operating leverage and higher tax rate led to PAT decline of 21.4% YoY in FY20.
- Against overall revenue growth of 10.6% over FY14-20, the company delivered Adj. PAT of 11.3% CAGR over the same period.

Exhibit 54: Effective tax rate higher in FY20 on account of write-back of DTA



Source: MOFSL, Company

Exhibit 55: Over FY14-20, BLSTR delivered Adj. PAT at 11.3% CAGR



Source: MOFSL, Company

Working Capital analysis

- BLSTR’s WC cycle improved significantly in FY20 owing to reduction in debtor days.
- Net WC as % of sales also improved over FY16-20 (FY18 was an exception when inventory days had shot up across the industry owing to bad summer season for ACs).
- From 20.4% of sales in FY14, Net WC has significantly improved to 6.2% in FY20.

Exhibit 56: Working capital analysis

	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Net working capital days	74	55	23	28	42	39	22
Net working capital (as a % of sales)	20.4	15.0	6.4	7.6	11.6	10.6	6.2
Receivable days	104	91	80	81	75	78	57
Payable days	58	55	51	50	80	61	59
Inventory days	103	102	104	98	121	107	108

Source: Company, MOFSL

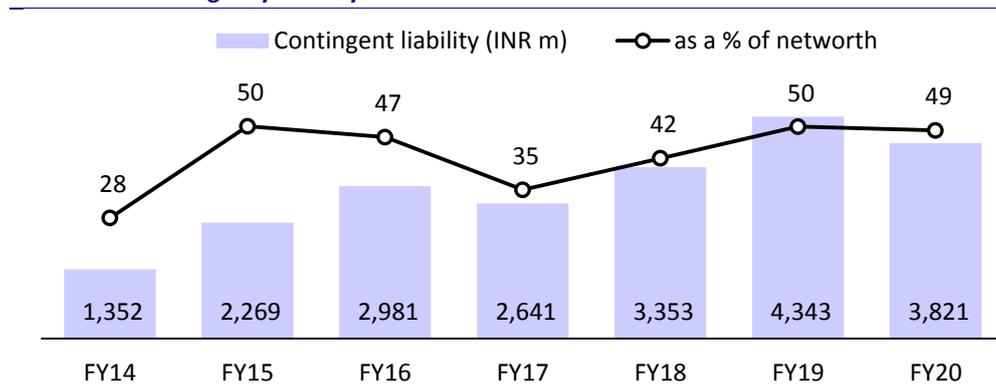
Contingent liability

- In FY20, contingent liability declined 12% YoY, but formed ~49% of Net worth.
- Contingent liability as % of Net worth stood at ~40-50% over FY15-20.
- Rise in contingent liability over FY15-20 can be mainly attributed to rise in disputes related to sales tax, service tax and income tax.

Exhibit 57: Contingent liability trend

(INR m)	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Claims against the company not acknowledged as debts	7	7	7	3	3	2	2
Sales tax matters	693	1,205	907	443	1,042	1,579	1,079
Excise duty matters	11	13	34	65	90	119	60
Service tax matters	106	181	1,521	1,514	1,631	1,737	1,590
Income tax matters	251	474	512	617	588	906	1,089
GST matters	-	-	-	-	-	1	1
Corporate Guarantee given on behalf of JVs	286	389					
Total	1,352	2,269	2,981	2,641	3,353	4,343	3,821

Source: MOFSL, Company

Exhibit 58: Contingency liability remained at ~50% of net worth over FY19-20

Source: MOFSL, Company

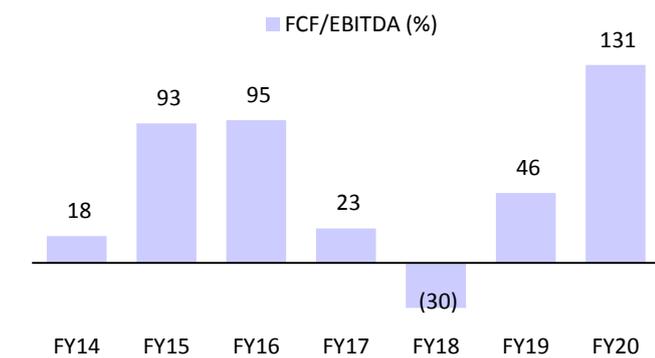
Cash flow analysis

- Barring FY18, the company has generated FCF over FY14-20. Improvement in WC position led to higher FCF in FY20 at INR3.7b.
- Over FY14-20, FCF/EBITDA and FCF/PAT have been positive, barring an aberration in FY18. FCF/PAT has been at 100% over FY14-20.
- In FY20, FCF/EBITDA stood at 131% with FCF/PAT conversion at 252% – the highest in the last six years.

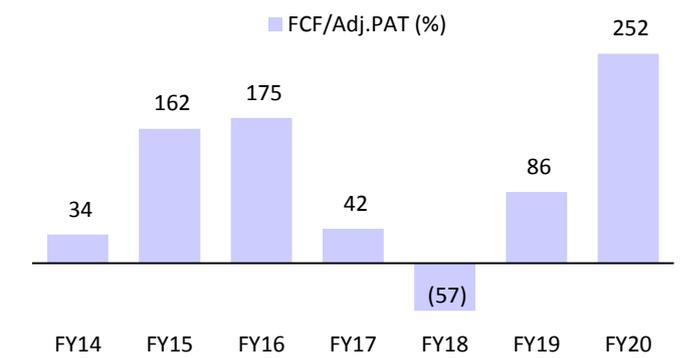
Exhibit 59: Cash flow statement

Y/E March (INR m)	2014	2015	2016	2017	2018	2019	2020
PBT before EO Items	762	427	1,563	1,586	1,956	2,511	2,060
Add : Depreciation	378	431	571	606	638	749	880
Interest	571	1,005	(212)	(46)	(41)	157	417
Less : Direct Taxes Paid	(188)	(257)	(319)	24	(451)	(352)	(854)
(Inc)/Dec in WC	(857)	543	964	(586)	(1,913)	(432)	2,072
CF from Operations	666	2,149	2,567	1,585	189	2,633	4,574
(Inc)/Dec in FA	57	(352)	(486)	(1,060)	(924)	(837)	(814)
Free Cash Flow	723	1,797	2,081	525	(735)	1,797	3,760
(Pur)/Sale of Investments & Others	55	(135)	(166)	1,755	40	138	(68)
CF from Investments	112	(487)	(652)	694	(883)	(698)	(882)
(Inc)/Dec in Debt	592	(967)	(232)	(1,698)	1,534	(274)	943
(Inc)/Dec in Equity	-	-	4	67	129	98	-
Less : Interest Paid	(536)	(497)	(429)	(381)	(285)	(479)	(311)
Dividend Paid	(315)	(440)	(1,293)	(18)	(864)	(1,154)	(2,301)
Others	0	(0)	44	263	23	74	(93)
CF from Fin. Activity	(259)	(1,904)	(1,905)	(1,768)	537	(1,734)	(1,762)
Inc/Dec of Cash	519	(241)	11	512	(158)	201	1,930
Add: Beginning Balance	165	684	443	454	966	808	1,010
Closing Balance	684	443	454	966	808	1,010	2,940

Source: MOFSL, Company

Exhibit 60: FCF/EBITDA stood at 131% in FY20...

Source: MOFSL, Company

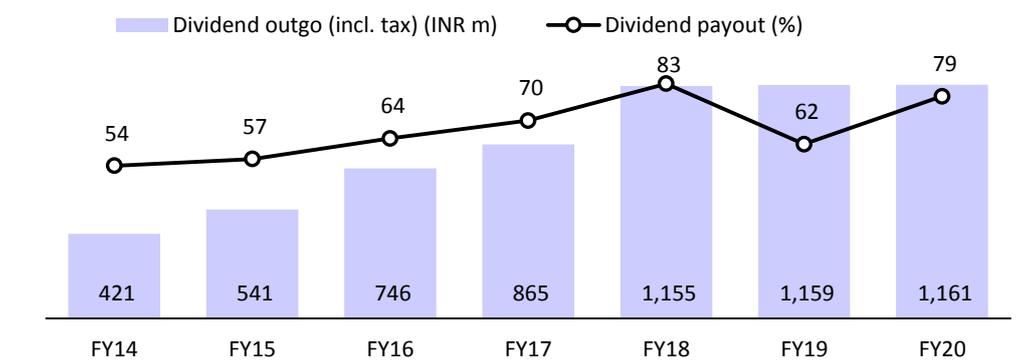
Exhibit 61: ...with FCF/PAT at 252% owing to higher FCF

Source: MOFSL, Company

Dividend payout trend

- With strong cash generation over FY14-20, dividend payout stood over 50% during the same period.
- Barring FY19, the dividend paid has steadily increased over 70% of Adj.PAT during FY17-20, and stood at 79% of Adj.PAT in FY20.

Exhibit 62: Dividend payout was over 50% since FY14, with payout rising considerably over FY16-20

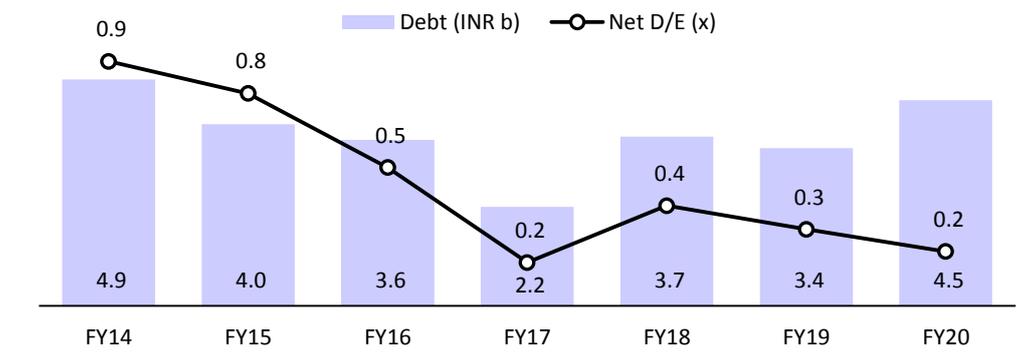


Source: MOFSL, Company

Debt analysis

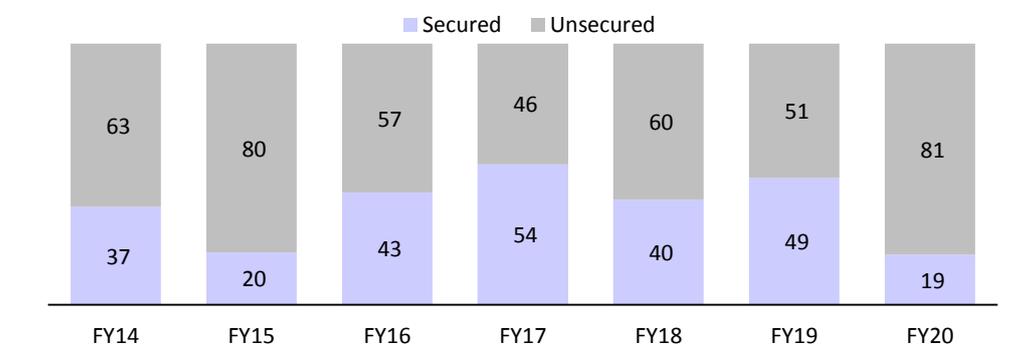
- BLSTR had INR4.5b worth of debt at end-FY20. Of this, INR0.5b is non-current debt and INR4b is current debt.
- With strong cash generation in FY20, Net D/E further improved to 0.2x. Even over FY14-20, Net D/E has declined from 0.9x in FY14 to 0.2x in FY20.

Exhibit 63: Stable debt with improving Net D/E ratio



Source: MOFSL, Company

Exhibit 64: % of secured and unsecured debt as part of total debt

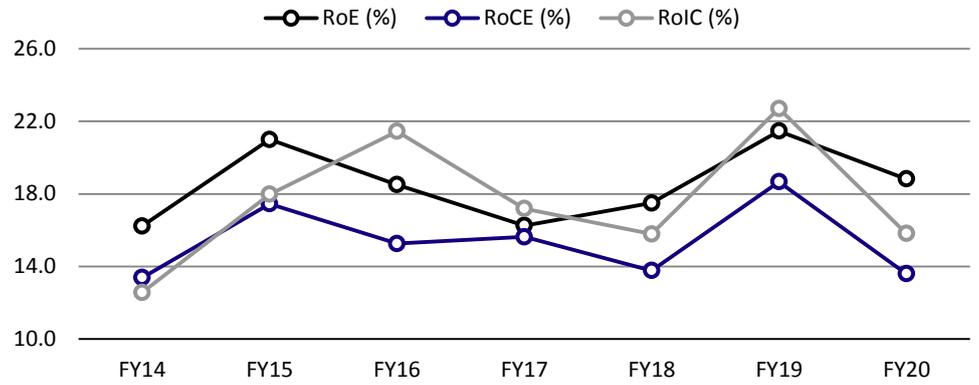


Source: MOFSL, Company

Return ratios

- BLSTR’s RoE has been healthy. RoE expanded from 16.2% in FY14 to 21.5% in FY19. Lower profitability in FY20 led to decline in RoE to 18.8%.
- Over FY14-19, RoIC also expanded from 12.6% to 22.7%, declining to 15.8% in FY20.

Exhibit 65: Trend of return ratios



Source: MOFSL, Company

Financials and valuation

Income Statement					(INR M)
Y/E March	2018	2019	2020	2021E	2022E
Total Revenues	46,390	52,348	53,602	45,000	57,500
Change (%)	5.8	12.8	2.4	-16.0	27.8
EBITDA	2,659	3,465	2,828	1,922	3,438
% of Total Revenues	5.7	6.6	5.3	4.3	6.0
Other Income	170	247	447	225	288
Depreciation	638	749	880	1,020	1,150
Interest	287	479	295	300	200
Exceptional items	53	27	-40	0	0
PBT	1,956	2,511	2,060	827	2,376
Tax	494	420	653	208	598
Rate (%)	25.3	16.7	31.7	25.2	25.2
Reported PAT	1,440	1,900	1,433	645	1,804
Change (%)	18.0	32.0	-24.6	-55.0	179.7
Adj. PAT	1,387	1,874	1,473	645	1,804
Change (%)	12.7	35.1	-21.4	-56.2	179.7

Balance Sheet					(INR M)
Y/E March	2018	2019	2020	2021E	2022E
Share Capital	192	193	193	193	193
Reserves	7,735	8,538	7,631	7,889	8,611
Net Worth	7,927	8,731	7,824	8,082	8,803
Minority Interest	15	18	23	28	32
Loans	3,699	3,445	4,489	4,489	4,489
Deferred Tax Liability	-1,136	-1,076	-818	-818	-818
Capital Employed	10,506	11,119	11,519	11,781	12,507
Gross Fixed Assets	5,363	6,194	7,344	8,344	9,344
Less: Depreciation	1,443	2,192	2,907	3,926	5,076
Net Fixed Assets	3,920	4,002	4,438	4,418	4,269
Capital WIP	254	412	674	674	674
Investments	132	146	169	199	229
Curr. Assets	26,921	27,874	28,295	25,007	30,996
Inventory	10,171	8,693	8,698	7,397	9,452
Debtors	9,504	11,121	8,377	7,032	8,986
Cash & Bank Balance	809	1,009	2,939	3,626	3,676
Loans & Other current assets	6,437	7,051	8,281	6,952	8,883
Current Liab. & Prov.	20,721	21,315	22,056	18,517	23,660
Creditors	15,327	15,346	15,824	13,284	16,974
Other liabilities	5,394	5,969	6,233	5,233	6,686
Net Current Assets	6,200	6,558	6,239	6,490	7,336
Application of Funds	10,506	11,119	11,519	11,781	12,507

Financials and valuation

Ratios

Y/E March	2018	2019	2020	2021E	2022E
Basic (INR)	15.0	19.7	14.9	6.7	18.7
Adj EPS	14.4	19.5	15.3	6.7	18.7
Cash EPS	21.1	27.2	24.4	17.3	30.7
Book Value	82.6	90.7	81.2	83.9	91.4
DPS	7.5	10.0	19.9	4.0	11.2
Payout (incl. Div. Tax.)	62.3	61.6	156.2	60.0	60.0
Valuation (x)					
P/E	33.6	25.0	31.8	72.6	25.9
Cash P/E	23.0	17.8	19.9	28.1	15.8
EV/EBITDA	18.6	14.2	17.1	24.8	13.8
EV/Sales	1.1	0.9	0.9	1.1	0.8
Price/Book Value	5.9	5.4	6.0	5.8	5.3
Dividend Yield (%)	1.5	2.1	4.1	0.8	2.3
Profitability Ratios (%)					
RoE	17.5	21.5	18.8	8.0	20.5
RoCE	13.8	18.7	13.6	6.9	14.7
RoIC	15.8	22.7	15.8	8.5	19.9
Turnover Ratios					
Debtors (Days)	75	78	57	57	57
Inventory (Days)	80	61	59	60	60
Creditors. (Days)	121	107	108	108	108
Asset Turnover (x)	4.4	4.7	4.7	3.8	4.6
Leverage Ratio					
Debt/Equity (x)	0.4	0.3	0.2	0.1	0.1

Cash Flow Statement

Y/E March	2018	2019	2020	2021E	2022E
PBT before EO Items	1,956	2,511	2,060	827	2,376
Depreciation	638	749	880	1,020	1,150
Interest & other income	(41)	157	417	75	(88)
Direct Taxes Paid	(451)	(352)	(854)	(208)	(598)
(Inc)/Dec in WC	(1,913)	(432)	2,072	435	(796)
CF from Operations	189	2,633	4,574	2,148	2,045
(Inc)/Dec in FA	(924)	(837)	(814)	(1,000)	(1,000)
Free Cash Flow	(735)	1,797	3,760	1,148	1,045
Investment in liquid assets	40	138	(68)	225	288
CF from Investments	(883)	(698)	(882)	(775)	(713)
(Inc)/Dec in Debt	1,534	(274)	943	-	-
(Inc)/Dec in Equity	129	98	-	-	-
Interest Paid	(285)	(479)	(311)	(300)	(200)
Dividend Paid	(864)	(1,154)	(2,301)	(387)	(1,082)
Others	23	74	(93)	-	-
CF from Fin. Activity	537	(1,734)	(1,762)	(687)	(1,282)
Inc/Dec of Cash	(158)	201	1,930	686	50
Add: Beginning Balance	966	808	1,010	2,940	3,626
Closing Balance	808	1,010	2,940	3,626	3,676

NOTES

Explanation of Investment Rating	
Investment Rating	Expected return (over 12-month)
BUY	>=15%
SELL	< - 10%
NEUTRAL	< - 10 % to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online-reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co.Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- 1 MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months

- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 71934200/ 022-71934263; Website www.motilaloswal.com; CIN no.: L67190MH2005PLC153397. Correspondence Office Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad(West), Mumbai-400 064. Tel No: 022 7188 1000.

Registration Nos.: Motilal Oswal Financial Services Limited (MOFSL)*: INZ000158836(BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN - 146822; Investment Adviser: INA000007100; Insurance Corporate Agent: CA0579;PMS:INP000006712. Motilal Oswal Asset Management Company Ltd. (MOAMC): PMS (Registration No.: INP000000670); PMS and Mutual Funds are offered through MOAMC which is group company of MOFSL. Motilal Oswal Wealth Management Ltd. (MOWML): PMS (Registration No.: INP000004409) is offered through MOWML, which is a group company of MOFSL. Motilal Oswal Financial Services Limited is a distributor of Mutual Funds, PMS, Fixed Deposit, Bond, NCDs, Insurance Products and IPOs. Real Estate is offered through Motilal Oswal Real Estate Investment Advisors II Pvt. Ltd. which is a group company of MOFSL. Private Equity is offered through Motilal Oswal Private Equity Investment Advisors Pvt. Ltd which is a group company of MOFSL. Research & Advisory services is backed by proper research. Please read the Risk Disclosure Document prescribed by the Stock Exchanges carefully before investing. There is no assurance or guarantee of the returns. Investment in securities market is subject to market risk, read all the related documents carefully before investing. Details of Compliance Officer: Name: Neeraj Agarwal, Email ID: na@motilaloswal.com, Contact No.:022-71881085.

* MOSL has been amalgamated with Motilal Oswal Financial Services Limited (MOFSL) w.e.f August 21, 2018 pursuant to order dated July 30, 2018 issued by Hon'ble National Company Law Tribunal, Mumbai Bench.