

SONA BLW Precision Forging

Estimate change	↔
TP change	↔
Rating change	↔

Bloomberg	SONACOMS IN
Equity Shares (m)	621
M.Cap.(INRb)/(USDb)	299.1 / 3.5
52-Week Range (INR)	769 / 380
1, 6, 12 Rel. Per (%)	1/-30/-30
12M Avg Val (INR M)	1290

Financials & Valuations (INR b)

Y/E Mar	2025	2026E	2027E
Sales	35.5	40.0	44.3
EBITDA (%)	27.4	26.8	27.0
Adj. PAT	6.1	6.1	6.8
EPS (INR)	9.9	9.8	11.0
EPS Gr. (%)	10.5	-1.1	12.3
BV/Sh. (INR)	90.8	96.1	102.5

Ratios

Net D:E	0.0	0.0	0.0
RoE (%)	14.5	10.5	11.0
RoCE (%)	13.6	10.1	10.7
Payout (%)	38.0	46.1	41.0

Valuations

P/E (x)	48.7	49.2	43.8
P/BV (x)	5.3	5.0	4.7
EV/EBITDA (x)	28.6	25.9	23.1
Div. Yield (%)	0.8	0.9	0.9
FCF Yield (%)	1.2	1.3	1.4

Shareholding pattern (%)

As On	Mar-25	Dec-24	Mar-24
Promoter	28.0	28.0	29.7
DII	34.4	31.2	28.8
FII	29.9	33.3	32.9
Others	7.6	7.6	8.6

FII Includes depository receipts

CMP:INR481 **TP: INR490 (+2%)** **Neutral**

Margins hurt by adverse mix

Multiple global headwinds to restrain growth

- SONA BLW (SONACOMS)'s adjusted EBITDA margin came in below our estimates in 4QFY25 due to a model changeover at one of its key OEMs as well as an adverse mix. Adjusted PAT exceeded our estimates because of higher-than-expected other income from surplus funds. The company continues to win new orders, especially in its core division, resulting in its ever-increasing order backlog at INR242b (6.8x revenue in FY25). The share of EVs was higher in the order book/revenue at ~76%/36% as of FY25.
- SONACOMS is now seeing the impact of a slowdown in the EV transition, with 4Q revenue/EBITDA declining 4%/1% YoY. The ongoing global tariff war, weak global macro, and expected supply chain disruption, especially in EVs, remain key headwinds in the near term, which would restrict growth. Given these factors, valuations at ~49x FY26E/44x FY27E consol. EPS appears expensive. **Reiterate Neutral with a TP of INR490**, premised on ~40x FY27E consol. EPS and assigning INR49/share for the recently acquired railway business.

Margin down QoQ due to a model changeover and unfavorable mix

- Revenue declined 2% YoY to INR8.6b vs. 1% growth in the underlying industry. This underperformance in 4Q was largely due to the model changeover at one of its large OEMs. BEV revenue grew 8% YoY in Q4 and BEV revenue share for Q4 has risen to 35%.
- Its reported EBITDA margin stood at 27.1%. However, it is important to note that the company has taken the full-year PLI benefit in 4Q. Adjusting for the prior period benefit of INR190m, EBITDA margin stands at 25.4% – down 260bp YoY and lower than our estimate of 26.2%.
- SONACOMS' 4QFY25 margins were also impacted by an adverse mix.
- Other income was higher than expected at INR522m, due to surplus funds.
- Led by higher-than-expected other income, adjusted PAT came in at INR1.5b (+2% YoY growth) – ahead of our estimate of INR1.35b.
- For FY25, revenue grew 12% YoY to INR35.5b vs. underlying industry growth of 2% YoY.
- For FY25, BEV revenue grew by 38% YoY and its contribution has increased to 36% from 29% YoY.
- EBITDA margin dipped 90bp YoY to 27.4% due to the adverse mix.
- Overall, PAT grew 16% YoY to INR6b in FY25.
- SONACOMS delivered an FCF of INR3.6b after incurring a capex of INR4.2b in FY25.
- Closing cash and cash equivalents surged to INR26.7b due to INR23.7b worth of QIP proceeds.

Highlights from the management commentary

- The company won new orders worth INR47b in FY25, and the net order win stood at INR242b (6.8x FY25 revenue). EV mix in this order book was 77%.
- New order wins in 4Q included: 1) a large order from a new-age North American EV OEM (existing customer) for rotor embedded differential sub-assembly and epicyclic geartrain worth INR15.2b with SOP for 4QFY26, and 2) a steering bevel box for CVs from an existing global OEM worth INR1.1b with SOP for 3QFY26.
- SONACOMS is also planning to look at opportunities in new areas such as humanoid robots. According to expert estimates, the humanoids market is likely to surge to 10m units by 2035. In this, SONACOMS is looking at working on components that would contribute to about 50-60% of its BOM cost worth USD35-50k which includes components like reducers and gears, sensors, motors, controllers, embedded software, etc.
- **The US tariff impact:** SONACOMS generates ~40% of its revenue from North America. It has identified about 3% of its revenue contribution from products that may see some risk due to the US tariff impact. The indirect impact from the US is likely to result in a slowdown in end markets and disrupt the global supply chain in the short term. Additionally, the restriction on the supply of rare earth metals from China is expected to cause further disruptions in the electric vehicle (EV) supply chain in the near future.

Valuation and view

- SONACOMS is poised for faster-than-industry growth driven by 1) content enhancement in the existing portfolio; 2) market share gains in key geographies; and 3) new products such as traction motors, controllers, BSG, and sensors. Further, its focus on expanding the product portfolio, global scale, and customer base should translate into strong earnings growth and healthy capital efficiency.
 - However, SONACOMS is currently witnessing the impact of a slowdown in the EV transition, with 4Q revenue/EBITDA growth at -4%/-1%. The ongoing global tariff war, weak global macro, and likely supply chain disruption – especially in EVs – remain key headwinds in the near term, which would restrict growth. Given these factors, valuations at ~49x FY26E/44x FY27E consol. EPS appears expensive.
- Reiterate Neutral with a TP of INR490**, premised on ~40x FY27E consol. EPS and assigning INR49 per share for the recently acquired railway business.

Consol. quarterly performance

(INR m)

Y/E March	FY24				FY25				FY24	FY25	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE
Net operating revenues	7,322	7,908	7,766	8,853	8,930	9,251	8,680	8,494	31,848	35,545	8,464
Change (%)	24.3	20.3	13.4	19.0	22.0	17.0	11.8	-4.0	19.0	11.6	-4.4
EBITDA	2,034	2,233	2,273	2,481	2,512	2,549	2,342	2,160	8,651	9,753	2,218
EBITDA Margins (%)	27.8	28.2	29.3	28.0	28.1	27.6	27.0	25.4	27.2	27.4	26.2
Depreciation	511	534	559	598	606	626	666	646	2,202	2,544	680
EBIT	1,523	1,699	1,714	1,883	1,905	1,923	1,677	1,513	6,449	7,209	1,538
EBIT Margins (%)	20.8	21.5	22.1	21.3	21.3	20.8	19.3	17.8	20.2	20.3	18.2
Interest	53	60	73	71	86	106	58	52	258	302	53
Non-Operating Income	54	61	50	75	70	210	468	522	239	1,269	321
PBT	1,495	1,641	1,690	1,886	1,889	1,918	2,030	2,147	6,343	8,173	1,805
Effective Tax Rate (%)	25.1	24.4	21.0	21.5	25.0	25.1	25.8	23.8	24.3	24.2	24.9
Adjusted PAT	1,142	1,286	1,336	1,481	1,417	1,546	1,564	1,473	4,871	6,200	1,356
Change (%)	50.6	39.0	24.7	20.2	24.0	20.2	17.1	-0.6	31.8	27.3	-8.4
Cost Break-up											
RM Cost (% of sales)	43.1	44.9	40.9	43.6	42.4	44.0	44.1	44.3	43.1	43.5	44.3
Staff Cost (% of sales)	6.7	7.0	9.4	8.2	8.5	8.5	9.4	9.2	7.9	8.9	9.6
Other Cost (% of sales)	22.4	19.9	20.4	20.2	20.9	19.9	19.5	21.0	21.8	20.2	19.8



Key takeaways from the management interaction

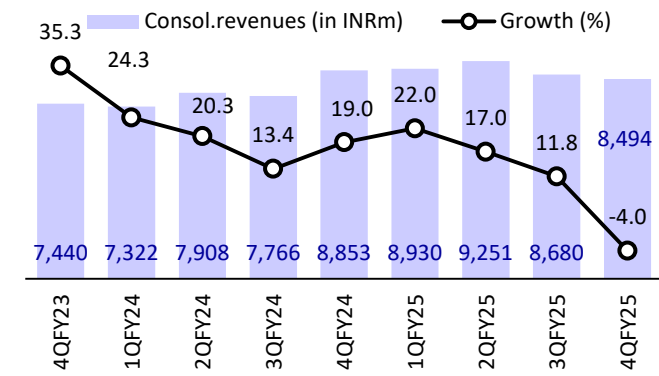
- Revenues are down YoY due to the model change-over at one of its largest customers. However, the new model has been launched in March and it is expected to ramp up to normalcy in the coming months.
- Dependence on ICE products has reduced to 9% in FY25.
- Integration of the Escorts Railway division is expected in Jun'25. After factoring in the Escorts Railways division integration, the proforma regional revenue mix would stand at: India: 43%, North America: 33%, and Europe: 19%. On a segmental basis, Autos would contribute to 70%, non-autos to 30%
- They have won new orders worth INR47b in FY25 and the net order win stands at INR242b (6.8x FY25 revenue). EV mix in this order book stood at 77%.
- New order wins in Q4 include: 1) a large order from a new-age North American EV OEM (existing customer) for rotor embedded differential sub-assembly and epicyclic geartrain worth INR15.2b with SOP for 4QFY26, and 2) a steering bevel box for CVs from an existing global OEM worth INR1.1b with SOP for 3QFY26.
- They are also planning to look at opportunities in new areas like humanoid robots. As per expert estimates, the humanoids market is likely to surge to 10m units by 2035. In this, Sona is looking at working on components that would contribute to about 50-60% of its BOM cost worth USD35-50k which includes components like reducers and Gears, sensors, motors, controllers, embedded hardware, software, etc.
- Given that battery charging speed and battery cell prices are both falling materially, management expects BEVs to achieve price parity with ICE in major regions by 2030. Hence, a rising transition to EVs appears inevitable, according to the management.
- Traction motors and differential assemblies for EVs remain its fastest-growing products at present.
- The company is going ahead with its first phase of investment (under USD10m) in Mexico (a Mexico-based company) despite the tariff-related uncertainties. The end product of the customer is not on the list of products that attract tariffs currently.
- Given the uncertainty of the EV transition, management has started receiving new RFQs for ICE components. In 4Q, the company won a couple of large starter motor orders for ICE vehicles.
- SONACOMS started supplies of the suspension motor in 4QFY25 to Neo and the response has been very good. The company continues to receive a lot of inquiries from other OEMs for the same.

The US tariff impact

- SONACOMS generates ~40% of its revenue from North America.
- It has identified about 3% of its revenue contribution from products that may see some risk due to the US tariff impact. Most other products have low to negligible risk currently.
- Further, management reiterated that it is not easy to change supply chains overnight and that it's a multi-year process.
- The indirect impact from the US is likely to result in a slowdown in end markets and disrupt the global supply chain in the short term.
- Additionally, the restriction on the supply of rare earth metals from China is expected to cause further disruptions in the EV supply chain in the near future. While the company sees no immediate impact given it has adequate stock, it would need to address this situation soon.
- However, the positive impact is possibly the fact that this will also drive a lot of consolidation in the market and this would lead to strong players emerging as winners in the long run.

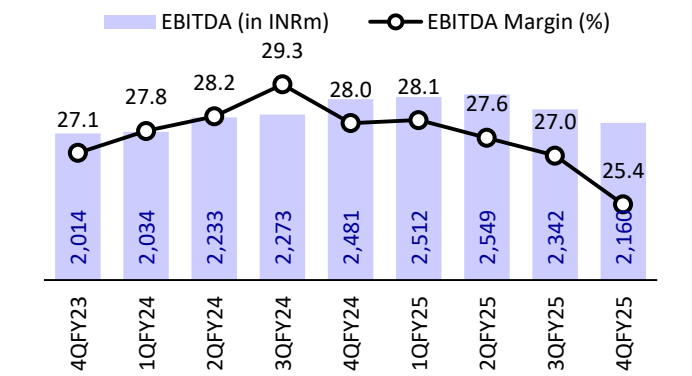
■ The other factor to note is that most of SONACOMS' competitors in its major product categories are from China and if the global supply chain looks to shift away from China, SONACOMS may emerge as one of the key beneficiaries.

Exhibit 1: Trend in revenue



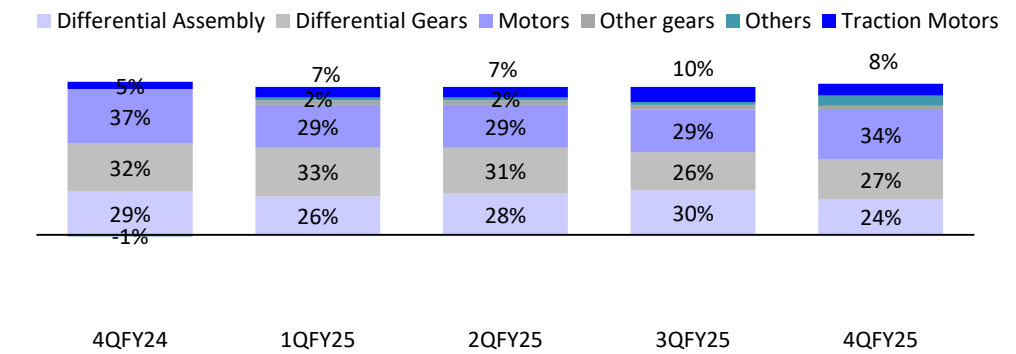
Source: Company, MOFSL

Exhibit 2: EBITDA and EBITDA margin trends



Source: Company, MOFSL

Exhibit 3: Revenue breakup for SONACOMS



Source: Company, MOFSL

Valuation and view

A unique blend of increasing EV share, global scale, and strong financials

- **Best proxy on global megatrends of electrification and premiumization:** SONACOMS offers a clean global play on the megatrends of electrification and premiumization. Its product portfolio of differential gears, motors, and sensors is on the right side of the auto industry evolution, with a substantial increase in content in EV products. It is also well-prepared for EV-specific components such as traction motors, controllers, and 48V BSG. It also benefits from the structural premiumization trend observed across segments – PVs (SUVs, 4WDs, BEVs), CVs (MAVs), and tractors (higher HP, 4WDs). The BEV segment already contributed 36% of revenue in FY25 (vs. 29%/26%/25% in FY24/FY23/FY22) and accounted for 76% of the order book.
- **Unique positioning of increasing EV sales, global scale, and a strong financial profile:** SONACOMS' unique positioning is driven by 1) a sizeable and increasing presence in EVs, 2) global scale and presence, 3) an expanding customer base, and 4) a strong financial profile. It is a dominant player in the Indian differential gears market and has been gaining market share globally in key product segments – differential gears (8.8% in CY24 vs. 8.1% in CY23), and starter motors (4.4% in CY23 vs. 4.2% in CY23). More importantly, it is truly a global player with a presence across the key markets of North America (~41%), India (~29%), the EU (~24%) and Asia (ex-India; ~6%).
- **Investing in R&D for future growth:** Its approach is to own the technology to capture the maximum value and offer the best products to its customers. Management indicated an increase in R&D spending in FY25 by ~100bp to ~3.3-3.4% of revenue, signifying its sustained focus on product innovation. Its technology roadmap focuses on developing new products, which help the company increase its share from EVs and reduce dependence on ICE vehicles. Additionally, it aims to capitalize on the EV opportunity at both ends of the power spectrum and eventually offer both product categories to all market segments. SONACOMS is among the few players that are well placed to combine their motor-driveline capabilities to offer integrated drive units with three key components: differential assembly, high-voltage traction motors, and high-voltage inverters.
- **To foray into the railway equipment business:** SONACOMS is acquiring Escorts Kubota's railway equipment division (RED) for an EV of INR16b. Escorts Kubota is the market leader in the railway brake system. RED is a leading supplier of critical components for Railways, such as brakes and suspension systems for various rolling stocks. Moreover, the acquisition is expected to be EPS-accretive for the company from the first year. While this may broaden the company's addressable market, we believe synergies are uncertain due to the new sector focus, and we will wait to evaluate execution.
- **Valuation and view:** Given the uncertainties around EV transition as well as the ongoing tariff-led challenges globally, we estimate SONACOMS to post a slower CAGR of 12%/11%/5% in consolidated revenue/EBITDA/PAT over FY25-27E. SONACOMS remains a good proxy play for the global electrification trend, with EVs accounting for ~36% of revenue and ~76% of the order book. Moreover, its focus on expanding the product portfolio, global scale, and customer base should translate into strong earnings growth and healthy capital efficiency.

However, valuations at ~49x/44x FY26E/FY27E consol. EPS does not reflect the demand slowdown in most of the geographies and reducing excitement around EVs. **Reiterate Neutral with a TP of INR490**, premised on ~40x FY27E consol. EPS and assigning INR49 per share for its railway division business.

Exhibit 4: Revisions to our estimates

(INR m)	FY26E			FY27E		
	Rev	Old	Chg (%)	Rev	Old	Chg (%)
Net Sales	40,010	39,319	1.8	44,268	43,590	1.6
EBITDA	10,726	10,696	0.3	11,945	12,032	-0.7
EBITDA (%)	26.8	27.2	-40bp	27.0	27.6	-60bp
Net Profit	6,073	6,055	0.3	6,821	6,897	-1.1

Key operating indicators

Exhibit 5: Expect strong revenue growth over FY25-27

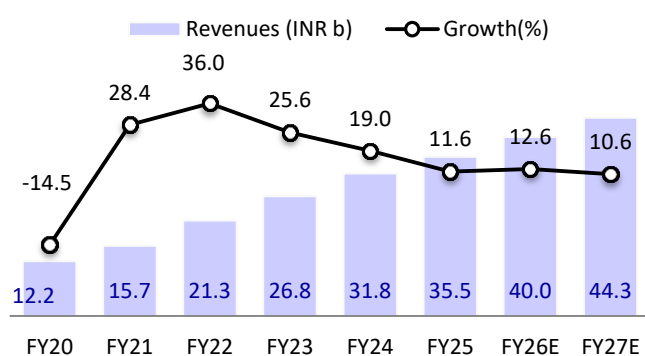


Exhibit 6: EBITDA margin likely to expand in FY25-27E

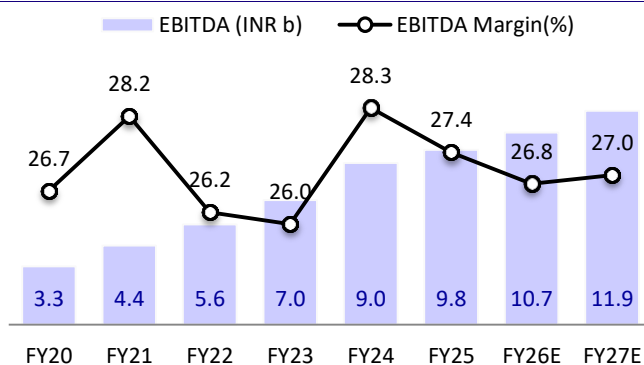


Exhibit 7: Expect 14% PAT CAGR over FY24-26

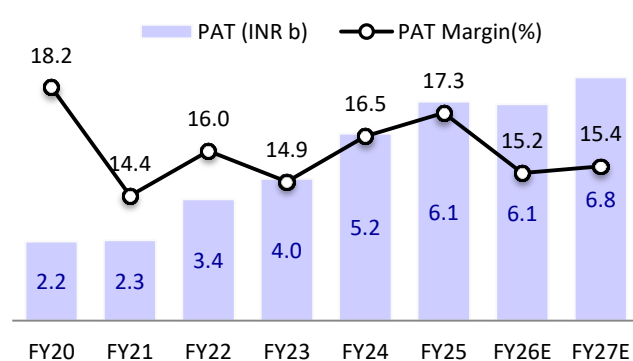


Exhibit 8: RoCE and RoE trends over the years

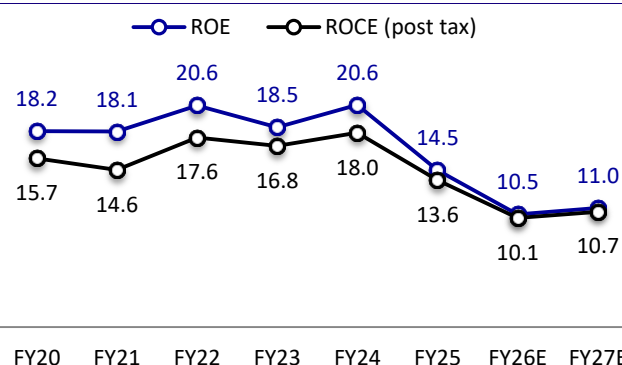


Exhibit 9: Capex to remain high from FY25E onward

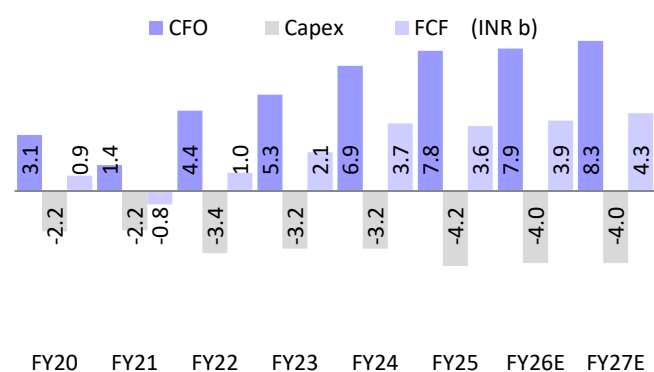
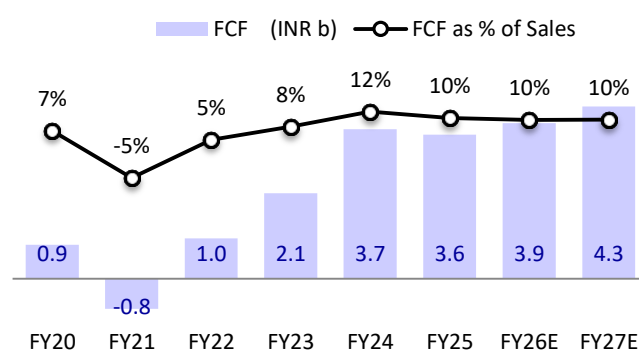


Exhibit 10: FCF should continue to improve



Financials and valuations

Income Statement							(INR m)	
Y/E March	2020	2021	2022	2023	2024	2025	2026E	2027E
Net operating income	12,201	15,663	21,306	26,756	31,848	35,545	40,010	44,268
Change (%)	-14.5	28.4	36.0	25.6	19.0	11.6	12.6	10.6
EBITDA	3,254	4,410	5,591	6,958	9,021	9,753	10,726	11,945
EBITDA Margin (%)	26.7	28.2	26.2	26.0	28.3	27.4	26.8	27.0
Depreciation	782	969	1,420	1,780	2,202	2,544	2,846	3,167
EBIT	2,472	3,441	4,171	5,178	6,819	7,209	7,881	8,778
EBIT Margin (%)	20.3	22.0	19.6	19.4	21.4	20.3	19.7	19.8
Interest cost	269	325	183	169	258	302	182	182
Other Income	76	23	200	116	239	1,269	420	523
Non-recurring Exp/(Inc)	0	139	-267	34	87	193	0	0
PBT after EO	2,279	3,000	4,456	5,091	6,713	7,983	8,119	9,119
Effective Tax Rate (%)	2.7	28.3	18.9	22.4	22.9	24.9	25.2	25.2
Reported PAT	2,217	2,152	3,615	3,953	5,178	5,997	6,073	6,821
Adj. PAT	2,217	2,251	3,399	3,979	5,245	6,142	6,073	6,821
Change (%)	4.2	1.5	51.0	17.1	31.8	17.1	-1.1	12.3

Balance Sheet							(INR m)	
Y/E March	2020	2021	2022	2023	2024	2025	2026E	2027E
Sources of Funds								
Share Capital	472	5,730	5,844	5,854	5,864	6,217	6,217	6,217
Reserves	11,308	7,309	14,159	17,048	20,639	48,731	52,005	56,029
Minority interest	0	0	0	0	1,498	1,499	1,499	1,499
Net Worth	11,779	13,039	20,003	22,902	28,001	56,447	59,722	63,745
Deferred Tax	1,077	1,260	884	876	1,261	1,252	1,252	1,252
Loans	2,614	3,052	704	2,175	2,331	2,022	2,022	2,022
Other non-current liabilities	534	721	698	661	2,200	2	2	2
Capital Employed	16,004	18,073	22,288	26,614	33,793	59,723	62,998	67,022
Application of Funds								
Gross Fixed Assets	5,494	6,395	9,382	12,889	16,323	20,634	24,634	28,634
Less: Depreciation	1,230	1,353	2,189	3,245	4,808	6,905	9,304	12,024
Net Fixed Assets	4,264	5,042	7,193	9,644	11,515	13,729	15,330	16,610
Intangibles	5,489	5,948	5,995	6,122	6,704	6,704	6,704	6,704
Amortisation	860	582	1,105	1,647	2,232	2,679	3,126	3,573
Net Intangibles	4,629	5,366	4,890	4,474	4,472	4,025	3,578	3,131
Capital WIP	896	832	1,474	911	3,636	4,195	4,195	4,195
Goodwill on consolidation	1,758	1,758	1,758	1,758	3,518	3,518	3,518	3,518
Investments	19	0	65	2,326	417	11,182	4,958	7,958
Curr.Assets, L & Adv.	6,940	8,750	10,577	11,485	15,090	28,721	37,968	38,855
Inventory	1,962	3,056	3,634	3,229	3,475	3,487	3,925	4,343
Sundry Debtors	2,336	4,170	4,452	6,089	6,483	7,052	7,938	8,783
Cash & Bank Balances	1,673	276	773	698	2,742	10,475	18,026	16,875
Loans & Advances	5	15	65	92	110	540	110	121
Others	963	1,234	1,654	1,376	2,281	7,168	7,970	8,734
Current Liab. & Prov.	2,503	3,676	3,669	3,984	4,856	5,647	6,548	7,245
Sundry Creditors	1,162	2,241	2,190	2,489	2,981	3,238	3,837	4,245
Other Liabilities	1,223	1,275	1,274	1,256	1,545	1,995	2,246	2,485
Provisions	118	159	206	239	330	414	466	516
Net Current Assets	4,437	5,075	6,908	7,501	10,235	23,074	31,419	31,610
Application of Funds	16,004	18,073	22,288	26,614	33,793	59,723	62,998	67,022

E: MOFSL Estimates

Financials and valuations

Ratios

Y/E March	2020	2021	2022	2023	2024	2025	2026E	2027E
Basic (INR)								
EPS	47.0	3.9	5.8	6.8	8.9	9.9	9.8	11.0
EPS Growth (%)	-38.8	-91.6	48.0	16.9	31.6	10.5	-1.1	12.3
Cash EPS	63.6	5.4	8.6	9.8	12.6	13.7	14.3	16.1
Book Value per Share	249.8	22.8	34.2	39.1	47.7	90.8	96.1	102.5
DPS	0.0	18.9	0.8	1.5	3.1	3.8	4.5	4.5
Payout (Incl. Div. Tax) %	0.0	504.1	12.4	22.7	34.7	38.9	46.1	41.0
FCF (INR/sh)	18.1	-1.3	1.7	3.6	6.4	5.8	6.2	6.9
Valuation (x)								
P/E	10.2	122.4	82.7	70.8	53.8	48.7	49.2	43.8
EV/EBITDA	7.3	63.1	50.4	40.4	31.4	28.6	25.9	23.1
EV/Sales	1.9	17.8	13.2	10.5	8.9	7.9	7.0	6.2
Price to Book Value	1.9	21.1	14.1	12.3	10.1	5.3	5.0	4.7
Dividend Yield (%)	0.0	3.9	0.2	0.3	0.6	0.8	0.9	0.9
FCF Yield (%)	3.8	-0.3	0.4	0.8	1.3	1.2	1.3	1.4
Profitability Ratios (%)								
RoE	18.2	18.1	20.6	18.5	20.6	14.5	10.5	11.0
RoCE (post-tax)	15.7	14.6	17.6	16.8	18.0	13.6	10.1	10.7
RoIC	17.3	16.2	18.3	18.9	21.2	17.8	16.9	17.8
Turnover Ratios								
Debtors (Days)	70	97	76	83	74	72	72	72
Inventory (Days)	59	71	62	44	40	36	36	36
Creditors (Days)	35	52	38	34	34	33	35	35
Working Capital (Days)	94	116	101	93	80	75	73	73
Asset Turnover (x)	0.8	0.9	1.1	1.1	1.1	0.8	0.7	0.7
Leverage Ratio								
Net Debt/Equity (x)	0.1	0.2	0.0	0.0	0.0	-0.3	-0.4	-0.4

Cash Flow Statement

Y/E March	2020	2021	2022	2023	2024	2025	2026E	2027E
(INR m)								
Profit before Tax	2,279	3,000	4,456	5,091	6,713	7,983	8,119	9,119
Depreciation & Amort.	782	969	1,420	1,780	2,202	2,544	2,846	3,167
Direct Taxes Paid	-398	-528	-544	-1,102	-1,553	-1,740	-2,046	-2,298
(Inc)/Dec in Working Capital	4	-2,070	-890	-630	-644	-556	-795	-1,342
Interest/Div. Received	-31	-29	-179	-112	-209	-805	-420	-523
Other Items	457	85	183	307	418	326	182	182
CF after EO Items	3,092	1,427	4,446	5,333	6,928	7,752	7,886	8,306
(Inc)/Dec in FA+CWIP	-2,239	-2,180	-3,438	-3,196	-3,191	-4,155	-4,000	-4,000
Free Cash Flow	853	-753	1,008	2,136	3,736	3,597	3,886	4,306
Interest/dividend received	39	22	179	31	204	602	420	523
(Pur)/Sale of Invest.	-7,286	598	-275	-2,450	-1,724	-14,070	6,225	-3,000
CF from Inv. Activity	-9,487	-1,561	-3,534	-5,615	-4,711	-17,623	2,645	-6,477
Inc/(Dec) in Debt	1,320	504	-2,954	1,471	94	-2,199	0	0
Interest Paid	-205	-246	-92	-12	-173	-96	-182	-182
Dividends Paid	-1,532	-904	-450	-1,199	-1,793	-1,892	-2,798	-2,798
Others	0	-21	-170	-113	84	23,623	0	0
CF from Fin. Activity	7,083	-667	-625	187	-1,747	19,436	-2,980	-2,980
Inc/(Dec) in Cash	689	-800	287	-95	469	9,565	7,551	-1,151
Add: Beginning Balance	361	1,050	249	536	441	910	10,475	18,026
Closing Balance	1,050	249	536	441	910	10,475	18,026	16,875

E: MOFSL Estimates

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

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 be 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, Depository participant services & distribution of various financial products. 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") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh Rajani

Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

Specific Disclosures

- Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies).
MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: No.
Nature of Financial interest is holding equity shares or derivatives of the subject company
- Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
- Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- Research Analyst has not served as an officer, director or employee of subject company(ies).
- 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(ies) in the past 12 months.
8. MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies) in the past 12 months.
9. MOFSL may have received compensation or other benefits from the subject company(ies) or 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 at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- 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.
- 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.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

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.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.