

Data Patterns (India)

Estimate change	↔
TP change	↓
Rating change	↔

Bloomberg	DATAPATT IN
Equity Shares (m)	56
M.Cap.(INRb)/(USDb)	156.9 / 1.8
52-Week Range (INR)	3655 / 1351
1, 6, 12 Rel. Per (%)	43/16/-26
12M Avg Val (INR M)	1800

Financials & Valuations (INR b)

Y/E Mar	FY25	FY26E	FY27E
Sales	7.1	8.9	11.1
EBITDA	2.8	3.4	4.3
Adj. PAT	2.2	2.8	3.6
EBITDA Margin (%)	38.8	37.9	38.5
Cons. Adj. EPS (INR)	39.6	49.7	63.9
EPS Gr. (%)	22.1	25.5	28.6
BV/Sh. (INR)	269.3	318.1	381.0

Ratios

Net D:E	-0.3	-0.3	-0.3
RoE (%)	15.7	16.9	18.3
RoCE (%)	16.3	17.5	18.7

Valuations

P/E (x)	71	56	44
EV/EBITDA (x)	55	45	35

Shareholding Pattern (%)

As on	Mar-25	Dec-24	Mar-24
Promoter	42.4	42.4	42.4
DII	7.4	8.8	11.6
FII	12.8	14.1	14.6
Others	37.5	34.7	31.4

Note: FII includes depository receipts

CMP: INR2,802 TP: INR2,530 (-10%) Neutral

Strong all-round performance

Earnings above estimates

- Data Patterns (DATAPATT) delivered a strong quarter as revenue surged 2.2x YoY, largely led by revenue growth of 2.7x YoY in the development segment and a 76% YoY jump in production revenue. However, EBITDA margins contracted 1,330bp YoY, led by low-margin strategic contracts taken up by the company.
- The closing order book as of Mar'25 stood at INR7.3b, down 33% YoY, as some orders worth INR10-20b were delayed in FY25 (are expected to materialize in FY26). As a result, the company has retained its revenue growth/EBITDA margin/PAT growth guidance of ~20-25%/35-40%/20% for FY26 despite ending FY25 with strong 36% revenue growth.
- Factoring in better than expected 4Q performance, however adjusting for company's guidance our FY26/FY27 EPS estimates are largely maintained. We reiterate our Neutral rating with a TP of INR2,530 **(We reiterate our Neutral rating with a TP of INR2,530 (premised on 40x FY27E EPS) considering the rich valuation.**

Development revenue surge drives operating profit growth

- Consolidated revenue jumped 2.2x YoY to INR3.9b (est. INR3b) in 4QFY25. Service/development/production revenue stood at INR40m/INR2.3b/INR1.7b, up 9%/2.7x/ 76% YoY.
- In terms of products, Radar/EW accounted for the largest revenue mix at ~60.1%/19.7%. In terms of customers, DRDO played a significant role this quarter, accounting for ~55.3% of the mix.
- Gross margins contracted 23pp YoY to 48.9%, led by low-margin strategic contracts taken up by the company. Employee/other expenses grew 11pp/28pp YoY to 7.5%/3.8% in 4QFY25.
- Accordingly, EBITDA margins contracted 1,330bp YoY to 37.7% (est. 40%). EBITDA jumped 61% YoY to INR1.5b (est. INR1.2b). Adjusted PAT grew 61% YoY to INR1.14b (est. INR946m).
- The order book stood at ~INR7.3b as of Mar'25 vs. INR10.95b/INR10.8b in Dec'24/Mar'24. Development/Production/Service account for 40%/51%/9% of the total order book.
- In FY25, revenue/EBITDA/adj. PAT jumped 36%/24%/22% to INR7b/INR2.7b/INR2.2b.

Highlights from the management commentary

- **R&D:** Management is strategically deploying funds to accelerate product development, with a substantial portion allocated to the expansion of its R&D capabilities. As the company transitions into a full-fledged system integrator, **development expenses are expected to rise.**
- **Inventory days:** As the business transitions toward production-heavy contracts, **working capital days are expected to reduce.** In defense equipment, inventory levels are expected to remain elevated due to long test cycles and extended lead times. Maintaining high inventory is critical to address urgent customer requirements efficiently.

Research Analyst: **Sumant Kumar** (Sumant.Kumar@MotilalOswal.com) | **Meet Jain** (Meet.Jain@MotilalOswal.com)

Research Analyst: **Nirvik Saini** (Nirvik.Saini@MotilalOswal.com) | **Yash Darak** (Yash.Darak@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.

- **Orders:** Additional contracts under Brahmos are expected to materialize in the near term. Also, the company may be able to finalize a contract for Ashwini LLTR radar within the next three to six months. The company also plans to venture into new product categories, including spoofing technologies, airborne intelligence and electronic jamming.

Valuation and view

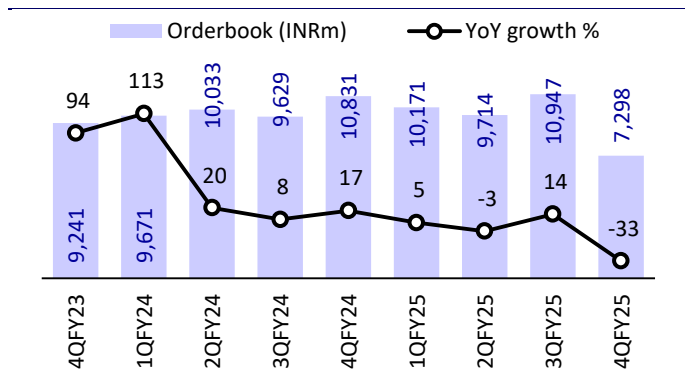
- DATAPATT ended FY25 on a strong note, with 56% of its revenue being generated in 4Q. While the order book came down as of Mar'25, the company is optimistic about booking higher orders in FY26.
- We expect the company to see lower growth in FY26 YoY, led by a lower order book and lower margins due to a higher mix of production revenue. However, in the medium to long term, we expect the company to continue its healthy performance. The overall macro scenario amid rising border tensions, along with management's focus on expanding the addressable market and the shift toward complete systems, positions the company well for a positive long-term outlook.
- We estimate a CAGR of 25%/25%/27% in revenue/EBITDA/adj. PAT over FY25-27. **We reiterate our Neutral rating with a TP of INR2,530 (premised on 40x FY27E EPS).**

Consolidated - Quarterly Earning Model

Y/E March									(INR m)			
	FY24				FY25				FY24	FY25	FY25E	Var
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			4QE	%
Gross Sales	897	1,083	1,395	1,823	1,041	910	1,170	3,962	5,198	7,084	3,008	32
YoY Change (%)	31.2	22.9	24.8	-1.5	16.0	-16.0	-16.1	117.4	14.6	36.3	65.0	
Total Expenditure	619	676	795	893	669	567	630	2,467	2,982	4,334	1,804	
EBITDA	278	408	600	930	372	343	540	1,495	2,217	2,750	1,204	24
Margins (%)	31.0	37.6	43.0	51.0	35.7	37.7	46.2	37.7	42.6	38.8	40.0	
Depreciation	28	31	33	70	31	35	35	39	162	139	40	
Interest	17	23	23	30	30	28	32	31	93	121	30	
Other Income	116	108	113	123	123	120	114	106	460	463	130	
PBT before EO expense	349	463	657	953	435	400	588	1,531	2,422	2,953	1,264	
Extra-Ord expense	0	0	0	0	0	0	0	0	0	0	0	
PBT	349	463	657	953	435	400	588	1,531	2,422	2,953	1,264	
Tax	91	125	148	242	107	98	141	390	605	735	318	
Rate (%)	25.9	27.0	22.4	25.4	24.5	24.4	24.0	25.5	25.0	24.9	25.2	
Minority Interest & Profit/Loss of Asso. Cos.	0	0	0	0	0	0	0	0	0	0	0	
Reported PAT	258	338	510	711	328	303	447	1,141	1,817	2,218	946	
Adj PAT	258	338	510	711	328	303	447	1,141	1,817	2,218	946	21
YoY Change (%)	81.4	60.5	53.0	28.4	26.9	-10.4	-12.4	60.5	46.6	22.1	29.6	
Margins (%)	28.8	31.2	36.5	39.0	31.5	33.3	38.2	28.8	35.0	31.3	31.4	

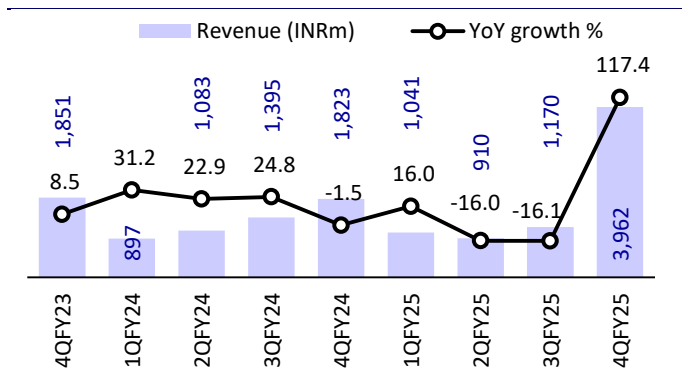
Key Exhibits

Exhibit 1: Consolidated order book trend



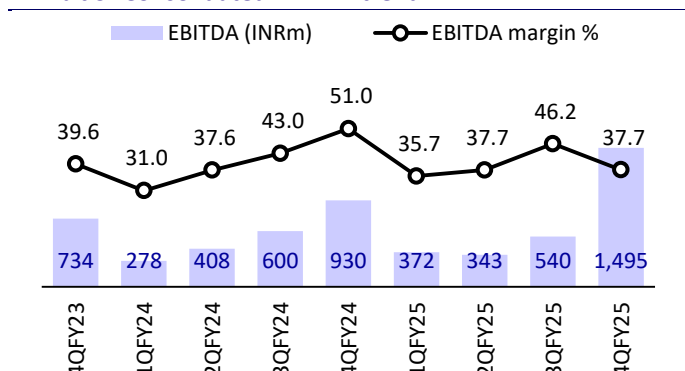
Source: Company, MOFSL

Exhibit 2: Consolidated revenue trend



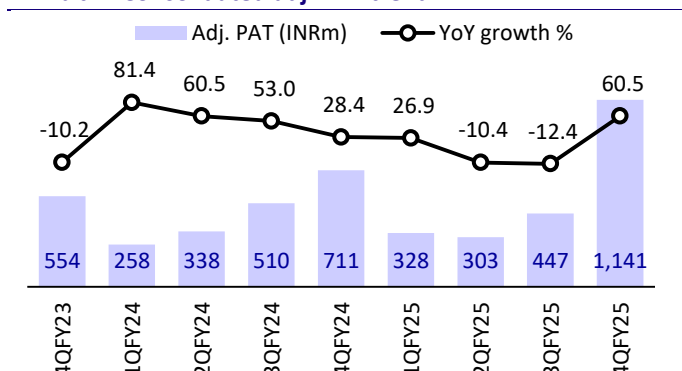
Source: Company, MOFSL

Exhibit 3: Consolidated EBITDA trend



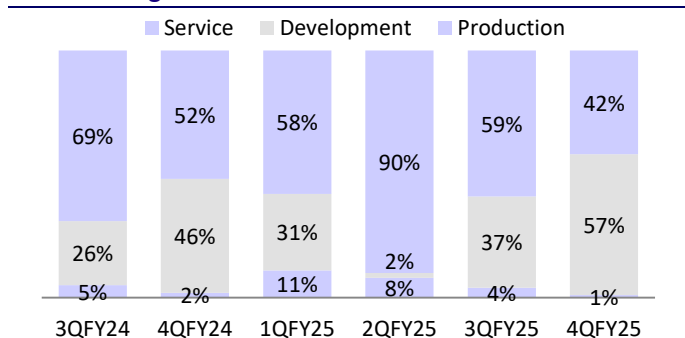
Source: Company, MOFSL

Exhibit 4: Consolidated adj. PAT trend



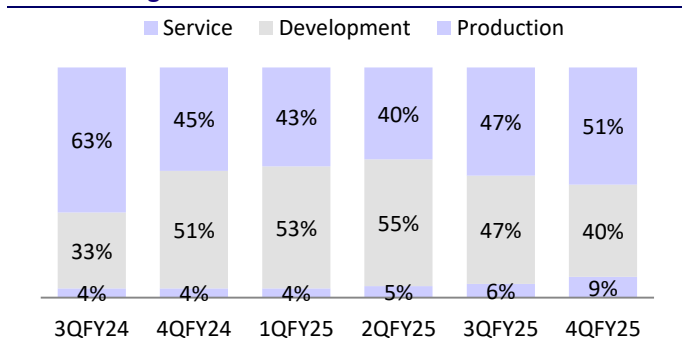
Source: Company, MOFSL

Exhibit 5: Segment revenue mix



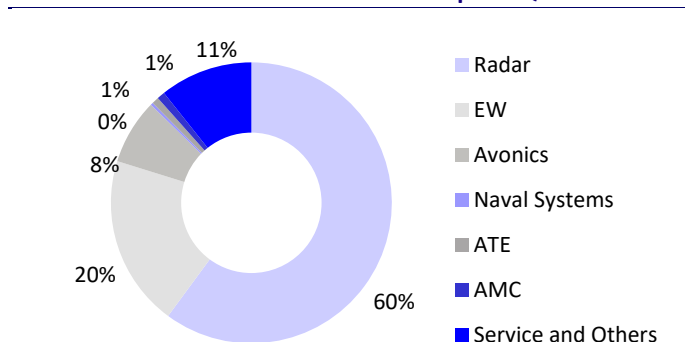
Source: Company, MOFSL

Exhibit 6: Segment order book mix



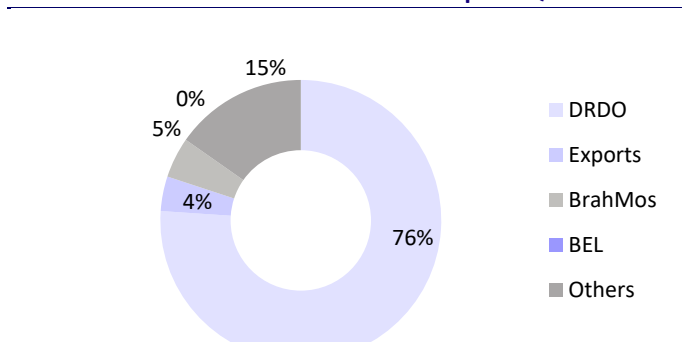
Source: Company, MOFSL

Exhibit 7: Product-wise revenue break-up in 4QFY25



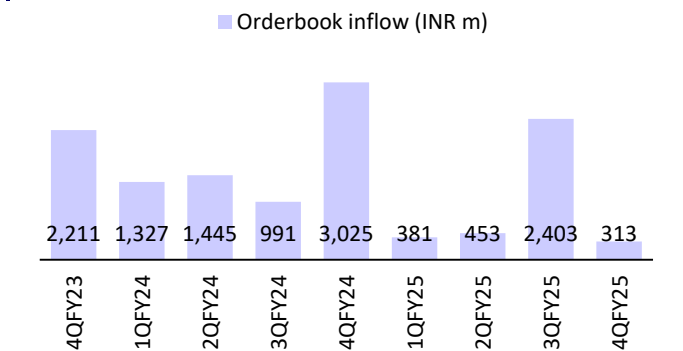
Source: Company, MOFSL

Exhibit 8: Customer mix revenue break-up in 4QFY25



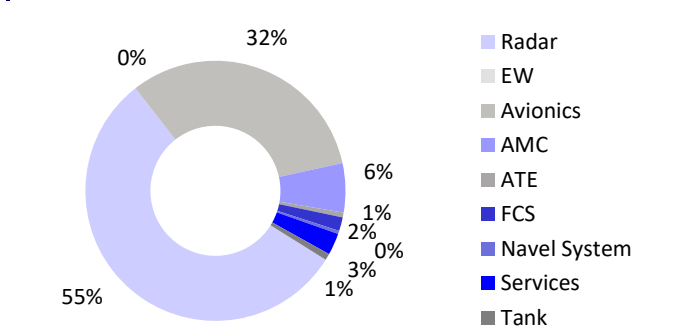
Source: Company, MOFSL

Exhibit 9: DATAPATT's order inflow breakup



Source: Company, MOFSL

Exhibit 10: Product-wise order book mix % as on Mar'25



Source: Company, MOFSL

Exhibit 11: Major orders received by DATAPATT in 4QFY25/FY25

Major order received in 4QFY25

Product	Customer	Order Type	Value (Rs Mn)
AMC	MOD	Service	140
AVIONICS	Export	Production	28
AVIONICS	DPSU	Production	28
AMC	CUSAT	Service	24
Radar	ITR	Production	13
AMC	DoS	Service	11
AMC	Brahmos	Service	10

Major order received in FY25

Product	Customer	Order Type	Value (Rs Mn)
EW	DPSU	Production	798
Radar	MOD	Production	531
AVIONICS	Export	Production	530
AVIONICS	Export	Production	157
FCS	Brahmos	Development	144
AMC	MOD	Service	140
AMC	MOD	Service	140
AMC	MOD	Service	140
ATE	DRDO	Production	113
AVIONICS	ADA	Development	103

Source: MOFSL, Company



Highlights from the management commentary

Operating performance

- In 4QFY25, a substantial portion of the revenue and order book was led by sales to DRDO and DPSU.
- The company faced a contraction in gross margin to 49% in 4Q, down by 23pp, led by low-margin strategic contracts taken up by the company.
- Current exports are limited to ground systems; the company is exploring partnerships to enter the airborne defense export segment.
- As the business transitions toward production-heavy contracts, working capital days are expected to reduce.

R&D and capex on new products

- The company is trying to get into a full system business, so development expenses are expected to be higher.
- It has already spent more than INR1.4b in the last one-and-a-half years on product development.
- The company has also planned a capex of more than INR1.5b over the next two years to support infrastructure development.

Guidance

- The company maintains its revenue guidance of ~20-25% growth over the next two to three years while maintaining EBITDA margins at around 35-40% for FY26.
- Additional contracts under Brahmos are expected to materialize in the near term.
- Management is strategically deploying funds to accelerate product development with a substantial portion allocated to expanding its R&D capabilities. As the company transitions into a full-fledged system integrator, development expenses are expected to rise.
- Moving forward, the company will focus on growing the addressable market, with an emphasis on manufacturing complete systems.

Order book

- The order book stands at INR7.3b/INR8.6b as of 31st Mar'25/as on date.
- About 70-80% of the total order book is expected to be executed in FY26.
- Border tensions may drive additional order inflows.
- Orders worth INR10-20b, initially delayed in FY25, are now expected to materialize in FY26.

Others

- The company may be able to finalize a contract for Ashwini LLTR radar within the next three to six months.
- In defense equipment, inventory levels are expected to remain high due to long test cycles and extended lead times. Maintaining high inventory is critical to address urgent customer requirements efficiently.
- It plans to venture into new product categories, including spoofing technologies, airborne intelligence and electronic jamming.
- Development-centric contracts demand higher working capital requirement.
- Sustainable margins depend on the contract. Margins may be higher if the contract is fully designed by the company.

Valuation and view

- DATAPATT ended FY25 on a strong note, with 56% of its revenue being generated in 4Q. While the order book came down as of Mar'25, the company is optimistic about booking higher orders in FY26.
- We expect the company to see lower growth in FY26 YoY, led by a lower order book and lower margins due to a higher mix of production revenue. However, in the medium to long term, we expect the company to continue its healthy performance. The overall macro scenario amid rising border tensions, along with management's focus on expanding the addressable market and the shift toward complete systems, positions the company well for a positive long-term outlook.
- We estimate a CAGR of 25%/25%/27% in revenue/EBITDA/adj. PAT over FY25-27. **We reiterate our Neutral rating with a TP of INR2,530 (premised on 40x FY27E EPS)**

Exhibit 12: Changes to our estimates

Earnings change (INR m)	Old		New		Change	
	FY26E	FY27E	FY26E	FY27E	FY26E	FY27E
Revenue	8,170	10,290	8,876	11,139	9%	8%
EBITDA	3,333	4,229	3,364	4,288	1%	1%
Adj. PAT	2,720	3,481	2,785	3,580	2%	3%

Financials and valuations

Consolidated - Income Statement							(INRm)	
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Total Income from Operations	1,561	2,240	3,109	4,535	5,198	7,084	8,876	11,139
Change (%)	19.1	43.5	38.8	45.9	14.6	36.3	25.3	25.5
RM Cost	561	704	861	1,709	1,637	2,761	3,461	4,288
Employees Cost	411	472	604	795	1,003	1,141	1,429	1,782
Other Expenses	157	144	233	312	342	432	621	780
Total Expenditure	1,129	1,320	1,698	2,816	2,982	4,334	5,512	6,850
% of Sales	72.4	58.9	54.6	62.1	57.4	61.2	62.1	61.5
EBITDA	432	920	1,410	1,718	2,217	2,750	3,364	4,288
Margin (%)	27.6	41.1	45.4	37.9	42.6	38.8	37.9	38.5
Depreciation	55	56	66	84	162	139	207	248
EBIT	377	864	1,344	1,634	2,055	2,611	3,157	4,040
Int. and Finance Charges	133	145	110	77	93	121	115	109
Other Income	41	26	40	92	460	463	666	835
PBT bef. EO Exp.	284	745	1,274	1,649	2,422	2,953	3,708	4,767
EO Items	0	0	0	0	0	0	0	0
PBT after EO Exp.	284	745	1,274	1,649	2,422	2,953	3,708	4,767
Total Tax	74	190	334	409	605	735	923	1,187
Tax Rate (%)	26.0	25.4	26.2	24.8	25.0	24.9	24.9	24.9
Minority Interest	0	0	0	0	0	0	0	0
Reported PAT	211	556	940	1,240	1,817	2,218	2,785	3,580
Adjusted PAT	211	556	940	1,240	1,817	2,218	2,785	3,580
Change (%)	173.4	163.9	69.1	31.9	46.6	22.1	25.5	28.6
Margin (%)	13.5	24.8	30.2	27.3	35.0	31.3	31.4	32.1

Consolidated - Balance Sheet							(INRm)	
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Equity Share Capital	17	17	104	112	112	112	112	112
Preference Capital	0	0	0	0	0	0	0	0
Total Reserves	1,518	2,062	5,641	11,559	13,130	14,970	17,699	21,223
Net Worth	1,535	2,079	5,745	11,671	13,242	15,082	17,811	21,335
Minority Interest	0	0	0	0	0	0	0	0
Total Loans	606	372	92	7	0	0	0	0
Deferred Tax Liabilities	8	9	-8	0	0	225	225	225
Capital Employed	2,148	2,460	5,830	11,678	13,242	15,307	18,035	21,559
Gross Block	447	425	634	1,176	1,629	2,717	3,195	3,890
Less: Accum. Deprn.	113	93	159	243	405	544	751	999
Net Fixed Assets	334	332	475	933	1,224	2,173	2,444	2,891
Goodwill on Consolidation	0	0	0	0	0	0	0	0
Capital WIP	0	0	173	14	481	128	401	455
Total Investments	0	0	0	557	2,622	3,266	3,266	3,266
Current Investments	0	0	0	557	2,622	3,266	3,266	3,266
Curr. Assets, Loans&Adv.	2,620	2,954	6,411	12,847	12,591	12,824	15,857	19,864
Inventory	794	737	1,198	1,930	2,668	3,185	3,793	4,700
Account Receivables	1,156	1,559	1,983	3,825	3,988	5,964	7,052	8,850
Cash and Bank Balance	15	88	1,771	5,445	3,927	1,264	1,990	2,523
Loans and Advances	655	569	1,460	1,647	2,009	2,411	3,021	3,792
Curr. Liability & Prov.	805	826	1,230	2,671	3,676	3,084	3,931	4,916
Account Payables	173	120	416	431	501	838	1,051	1,302
Other Current Liabilities	506	560	570	2,107	3,028	2,073	2,663	3,342
Provisions	126	146	244	134	146	174	218	273
Net Current Assets	1,815	2,128	5,182	10,175	8,916	9,740	11,926	14,948
Misc Expenditure	0	0	0	0	0	0	0	0
Appl. of Funds	2,148	2,460	5,830	11,678	13,242	15,307	18,035	21,559

Financials and valuations

Ratios

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Basic (INR)								
EPS	24.8	65.4	18.1	22.1	32.4	39.6	49.7	63.9
Cash EPS	31.2	71.9	19.4	23.6	35.3	42.1	53.4	68.4
BV/Share	180.6	244.6	110.7	208.4	236.5	269.3	318.1	381.0
DPS	0.0	0.0	0.0	0.7	0.9	1.1	1.0	1.0
Payout (%)	0.0	0.0	0.0	3.2	2.8	2.8	2.0	1.6
Valuation (x)								
P/E	113.2	42.9	154.8	126.6	86.4	70.8	56.4	43.8
Cash P/E	89.8	39.0	144.6	118.5	79.3	66.6	52.5	41.0
P/BV	15.5	11.5	25.3	13.4	11.9	10.4	8.8	7.4
EV/Sales	15.6	10.8	46.3	33.3	28.9	21.5	17.1	13.6
EV/EBITDA	56.6	26.2	102.0	87.9	67.9	55.4	45.1	35.3
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCF per share	14.4	45.2	2.3	-9.9	8.5	-22.5	4.1	-2.5
Return Ratios (%)								
RoE	14.7	30.7	24.0	14.2	14.6	15.7	16.9	18.3
RoCE	15.2	28.9	24.6	14.8	15.1	16.3	17.5	18.7
RoIC	13.7	28.6	31.7	25.7	26.0	23.3	20.6	21.9
Working Capital Ratios								
Fixed Asset Turnover (x)	3.5	5.3	4.9	3.9	3.2	2.6	2.8	2.9
Asset Turnover (x)	0.7	0.9	0.5	0.4	0.4	0.5	0.5	0.5
Inventory (Days)	517	382	508	412	595	421	400	400
Debtor (Days)	270	254	233	308	280	307	290	290
Creditor (Days)	112	62	176	92	112	111	111	111
Leverage Ratio (x)								
Current Ratio	3.3	3.6	5.2	4.8	3.4	4.2	4.0	4.0
Interest Cover Ratio	2.8	6.0	12.2	21.2	22.0	21.6	27.5	37.1
Net Debt/Equity	0.4	0.1	-0.3	-0.5	-0.5	-0.3	-0.3	-0.3

Consolidated - Cash Flow Statement

(INRm)

Y/E March	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
OP/(Loss) before Tax	284	745	1,274	1,649	2,422	2,953	3,708	4,767
Depreciation	55	56	66	84	162	139	207	248
Interest & Finance Charges	108	123	70	-15	-367	121	-551	-726
Direct Taxes Paid	-28	-190	-284	-409	-605	-706	-923	-1,187
(Inc)/Dec in WC	-283	-299	-624	-1,482	-218	-2,976	-1,459	-2,489
CF from Operations	136	435	503	-173	1,394	-468	981	613
Others	-2	-1	0	0	0	-431	0	0
CF from Operating incl EO	134	434	503	-173	1,394	-899	981	613
(Inc)/Dec in FA	-12	-50	-382	-383	-920	-359	-750	-750
Free Cash Flow	123	384	121	-555	473	-1,257	231	-137
(Pur)/Sale of Investments	0	0	0	0	0	1,769	0	0
Others	26	137	-796	-1	-1,319	-520	666	835
CF from Investments	14	88	-1,178	-384	-2,239	890	-84	85
Issue of Shares	0	0	3,000	0	0	0	0	0
Inc/(Dec) in Debt	-132	-300	-283	-85	-7	0	0	0
Interest Paid	0	-145	-89	-77	-93	-115	-115	-109
Dividend Paid	-4	-3	-111	-39	-50	-364	-56	-56
Others	0	0	-159	4,432	-522	-2,176	0	0
CF from Fin. Activity	-136	-449	2,359	4,231	-673	-2,655	-171	-165
Inc/Dec of Cash	12	73	1,683	3,675	-1,518	-2,663	726	533
Opening Balance	3	15	88	1,771	5,445	3,927	1,264	1,990
Closing Balance	15	88	1,771	5,445	3,927	1,264	1,990	2,523

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: Yes.
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.
4. 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.
 5. Research Analyst has not served as an officer, director or employee of subject company(ies).
 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(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 alterations 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, nor 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 dp@grievances@motilaloswal.com.