

# **Avalon Technologies**

**BSE Sensex** 

S&P CNX 23,437

#### **TP: INR970 (+17%) CMP: INR827**

# Buy

Tariff tailwinds and growing client base boost growth outlook

Avalon is uniquely placed in the Indian electronics manufacturing services (EMS) sector with its well-established manufacturing presence in the US. Moreover, the company serves various emerging and fast-growing end-user industries such as clean energy, mobility and medical technology across the globe, which cumulatively accounted for ~62% of Avalon's total revenue as of 9MFY25 (vs. ~59% as of FY24).

- Amid the current uncertain global environment where many countries are facing a major threat to their trading prospects due to US tariffs, India is believed to be in a favorable situation.
- After the Trump administration's decision to pause tariffs on all countries, except China, which is facing an exorbitant tariff of 245% on its exports to the US, the EMS sector may see a gradual shift of some business from China to India in the mid to long term. China exported ~20% of total electrical machinery to the US as of CY24 vs. India's 1.7%.
- Even if India is imposed with a proposed tariff of 26%, it will be lower than the proposed tariffs on India's key competitors, like China (245%), Vietnam (46%) and Taiwan (32%), in the EMS sector. This will present an opportunity for Indian EMS companies, especially for Avalon due to its well-established US plant.
- Along with a favorable tariff environment for India, Avalon is supported by an increase in domestic demand, stable/improving demand from the US, a healthy client mix (domestic and exports), and a favorable manufacturing presence compared to its peers.

# Favorable tailwinds amid the shifting global landscape

- Amid the global uncertain trade environment due to US import tariffs, we believe that India's EMS sector is relatively in an advantageous position.
- Scenario 1: Tariffs imposed by the US have hurt the global economy, though it might be a boon for Indian EMS companies, which enjoy a pause on tariffs until 9<sup>th</sup> Jul'25 compared to China, which is facing 245% tariffs as announced by the US on 15<sup>th</sup> Apr'25.
- Scenario 2: Even if tariffs were to be continued on other countries, India may still enjoy low tariffs of 26% compared with China (245%), Vietnam (46%) and Taiwan (32%).
- Considering both the scenarios, we find more confidence on our thesis of shift of business in this sector over mid to long term to India from China. China accounts for ~20% of the total electrical machinery exports to the US as of CY24 against India's ~1.7%
- This trade war has created a major opportunity for Avalon, which earns the majority of its revenue from US customers (58% of total sales as of 9MFY25). Moreover, its well-established manufacturing presence in the US (~12% US manufacturing revenue) also gives Avalon an edge over peers.
- Although the company's manufacturing mix has tilted toward India (88% as of 3QFY25 vs 70-75% as of FY23) for strategic reasons, it is in a position to **shift back automated tasks** to the US plants to reduce tariff exposure.

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.

77,044



Stock Info Bloomberg	AVALON IN
Equity Shares (m)	66
M.Cap.(INRb)/(USDb)	54.7 / 0.6
52-Week Range (INR)	1074 / 425
1, 6, 12 Rel. Per (%)	18/42/55
12M Avg Val (INR M)	370

# Financials & Valuations (INR m)

Financials & Valuations (INR m)					
2025E	2026E	2027E			
10.6	14.4	19.1			
1.1	1.7	2.4			
0.6	1.1	1.6			
10.3	12.0	12.6			
9.9	16.8	25.0			
131.4	70.1	49.2			
93.1	109.9	134.9			
(0.0)	(0.0)	(0.0)			
11.2	16.5	20.4			
10.4	14.8	18.8			
83.9	49.3	33.1			
46.2	29.3	21.0			
	2025E 10.6 1.1 0.6 10.3 9.9 131.4 93.1 (0.0) 11.2 10.4 83.9	2025E 2026E   10.6 14.4   1.1 1.7   0.6 1.1   10.3 12.0   9.9 16.8   131.4 70.1   93.1 109.9   (0.0) (0.0)   11.2 16.5   10.4 14.8   83.9 49.3			

# Shareholding pattern (%)

	01	1 N N			
As on	Dec-24	Sep-24	Dec-23		
Promoter	50.6	50.7	51.0		
DII	20.9	23.7	17.1		
FII	5.4	3.0	5.7		
Others	23.2	22.6	26.3		
Note: Ell includes depository receipts					

Note: FII includes depository receipts

# Stock Performance (1-year)





- The company would not face any margin pressures due to tariffs, thanks to its cost-plus structure on products.
- The company has also recently announced the completion of phase 1 of its Chennai plant, which is primarily dedicated to exports. This will help the company cater to rising demand due to the shift in EMS business to India.

# Rapid growth in operations across key clientele

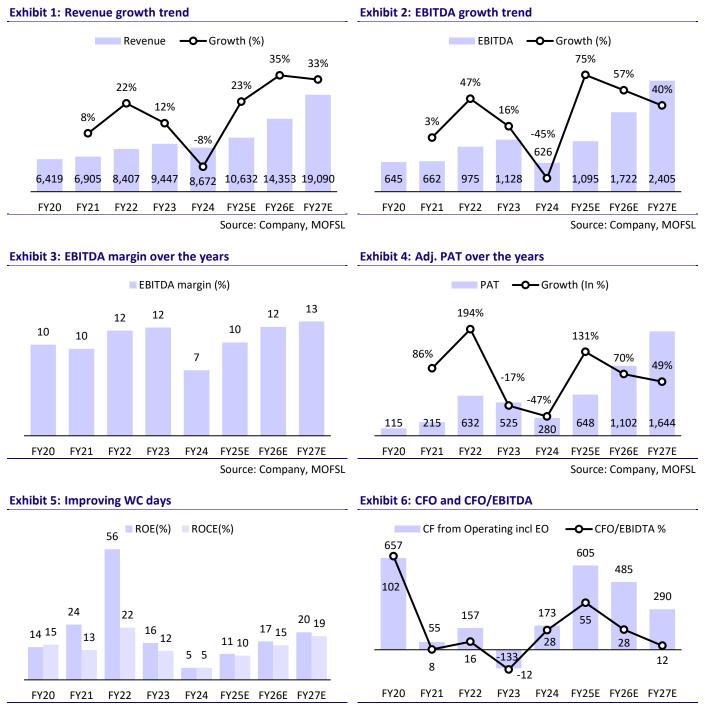
- India saw significant growth in B2B and B2C Printed Circuit Board (PCB) assembly demand due to increased import duties. We expect PCB and other passive components to be locally manufactured with a component policy now in place.
- India's electrical machinery dominates the country's exports to the US, accounting for ~15.6% of India's total exports as of CY24. This shows the US' dependence on exports for EMS products.
- We therefore believe that orders from key clients may not be significantly impacted by the tariffs, as the US is dependent on electronics imports.
- Avalon reported strong 28% YoY growth in the order book in 9MFY25, taking the combined order book (including long-term contract) to INR27b as of 9MFY25, backed by customer loyalty and a healthy client mix. The order book proportion has a similar mix to the revenue proportion of India and the US, showcasing sustainable demand from the US.
- Over the recent times, Avalon has witnessed strong order flows, backed by the revival of existing US customers, the addition of new customers in the US, and increased focus on the domestic industry.
- The company has been moving from the prototype stage to the volume production stage for multiple products, i.e., for a global auto component company that specializes in motion systems, aiding the increase in share of mobility segment.
- Avalon also focuses on the high-margin rail and aerospace division, which is seeing increased traction in the domestic EMS industry.
- In Railways, the company is actively working on the anti-collision KAVACH system, which Avalon believes will offer sufficient business potential in the future. The company expects to see tremendous growth in demand for this segment in FY26.
- Moreover, the growth trajectory of Avalon's clients also gives us confidence in the company's growth outlook. Following are some examples of expansion activities undertaken by Avalon's key clients:
- Ohmium International (clean energy segment client) launched a gigafactory in Doddaballapura, Bengaluru, in Jul'24. The facility will produce 2GW of fully assembled and tested PEM electrolyzer systems to meet the demands of Ohmium's global project pipeline.
- Sunrun (clean energy segment client in the US) recently in its FY24 results mentioned its plan to increase its storage capacity by 30% YoY by 1HFY25, showcasing a strong growth trajectory.
- **Collins Aerospace,** one of the key aerospace clients, added a 70,000-sqft facility in Aug'24, increasing its footprint by 50% to enhance production capacity.
- Witnessing strong traction in recent quarters in terms of client addition and order book, Avalon has also raised its revenue guidance to 22-24% from 16-20% earlier for FY25.



# Valuation and view

- We believe Avalon will be in a better position in the EMS space amid the tariff war, backed by its strategic manufacturing presence, longstanding US and global clientele, and increased order flows from the domestic market.
- With the company's US operations now witnessing a healthy recovery and the Indian business experiencing growth, we expect Avalon's revenue and profitability to see healthy improvement going forward.
- We estimate Avalon to post a CAGR of 30%/57%/80% in revenue/EBITDA/adj. PAT over FY24-27, driven by strong growth and healthy order inflows. Reiterate BUY with a TP of INR970.

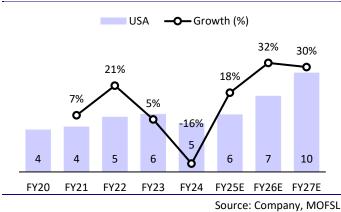
# **Story in Charts**



Source: Company, MOFSL



### **Exhibit 7: Rising US business**



### Exhibit 9: EMS exports to US (CY24)

Exhibit 13: Increase in order book size

### **Exhibit 8: Growing Indian business**

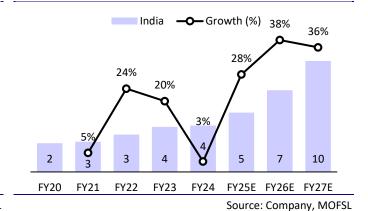
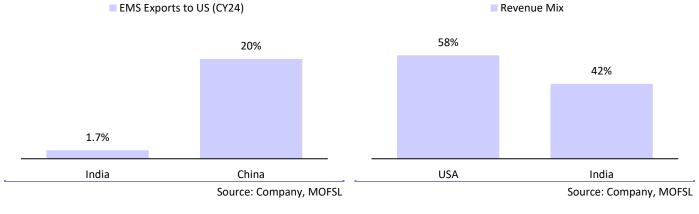
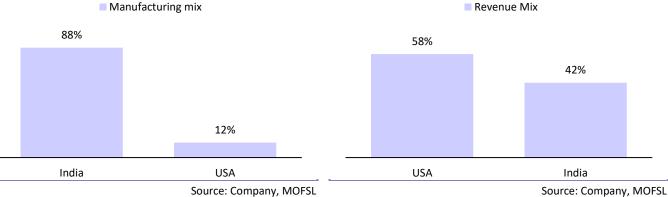


Exhibit 10: Revenue mix (9MFY25)

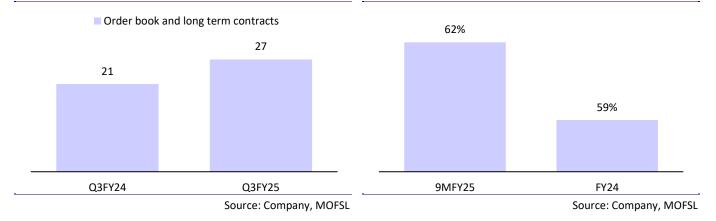






Source: Company, MOFSL

Exhibit 14: Increase in revenue share of clean energy, mobility and medical technology





# **Financials and valuations**

Consolidated - Income Statement								(INR m)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Total Income from Operations	6,419	6,905	8,407	9,447	8,672	10,632	14,353	19,090
Change (%)	NA	7.6	21.8	12.4	-8.2	22.6	35.0	33.0
RM Cost	4,128	4,574	5,552	6,067	5,545	6,785	9,100	12,141
Employees Cost	1,162	1,192	1,314	1,605	1,815	1,921	2,497	3,245
Other Expenses	484	478	566	647	685	832	1,033	1,298
Total Expenditure	5,774	6,243	7,432	8,319	8,046	9,538	12,631	16,685
% of Sales	90.0	90.4	88.4	88.1	92.8	89.7	88.0	87.4
EBITDA	645	662	975	1,128	626	1,095	1,722	2,405
Margin (%)	10.0	9.6	11.6	11.9	7.2	10.3	12.0	12.6
Depreciation	155	158	172	197	229	286	353	411
EBIT	490	504	803	931	397	808	1,369	1,995
Int. and Finance Charges	450	270	248	348	164	160	99	83
Other Income	113	54	309	144	148	246	250	286
PBT bef. EO Exp.	153	288	864	727	381	895	1,520	2,198
EO Items	0	0	0	0	0	0	0	0
PBT after EO Exp.	153	288	864	727	381	895	1,520	2,198
Total Tax	30	58	183	202	101	247	418	553
Tax Rate (%)	19.4	19.9	21.1	27.8	26.5	27.6	27.5	25.2
Minority Interest	8	16	50	0	0	0	0	0
Reported PAT	115	215	632	525	280	648	1,102	1,644
Adjusted PAT	115	215	632	525	280	648	1,102	1,644
Change (%)	NA	86.1	193.9	-16.9	-46.7	131.4	70.1	49.2
Margin (%)	1.8	3.1	7.5	5.6	3.2	6.1	7.7	8.6
Consolidated - Balance Sheet Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	(INRm) FY27E
Equity Share Capital	15	16	16	116	131	131	131	131
Preference Capital	356	388	388	0	0	0	0	0
Total Reserves	450	584	856	5,254	5,342	5,990	7,092	8,736
Net Worth	822	988	1,260	5,370	5,473	6,121	7,223	8,867
Minority Interest	-431	-317	0	0	0	0	0	0
Total Loans	2,388	2,775	2,789	3,063	1,642	1,442	1,042	1,042
Deferred Tax Liabilities	-263	0	0	0	15	15	15	15
Capital Employed	2,515	3,445	4,049	8,433	7,129	7,577	8,279	9,923
Gross Block	1,126	1,335	1,512	1,861	2,285	2,842	3,443	3,964
Less: Accum. Deprn.	139	295	390	586	815	1,101	1,454	1,865
Net Fixed Assets	987	1,041	1,123	1,275	1,470	1,741	1,989	2,098
Goodwill on Consolidation	0	0	0	0	0	0	0	0
Capital WIP	27	0	20	153	196	439	338	318
Total Investments	24	0	0	0	755	755	755	755
Current Investments	0	0	0	0	755	755	755	755
Curr. Assets, Loans&Adv.	3,197	4,084	4,738	10,375	6,886	7,376	8,560	11,042
Inventory	1,553	1,458	2,330	3,179	3,163	3,439	4,114	5,488
Account Receivables	1,138	1,819	1,774	2,062	1,869	2,330	2,949	3,923
Cash and Bank Balance	266	335	101	4,222	1,065	756	492	485
Loans and Advances	241	472	532	912	789	851	1,005	1,145
Curr. Liability & Prov.	1,719	1,680	1,831	3,370	2,178	2,734	3,363	4,289
Account Payables	1,369	1,289	1,242	1,418	974	1,394	1,870	2,495
	1,505							
Other Current Liabilities	216	253	449	1,823	1,048	1,170	1,292	1,527
Other Current Liabilities Provisions	216 134	253 138	449 141	1,823 130	1,048 156	1,170 170	201	1,527 267
	216	253						



# **Financials and valuations**

Ratios								
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
Basic (INR)								
EPS	2.0	3.7	10.9	9.1	4.3	9.9	16.8	25.0
Cash EPS	4.7	6.4	13.9	12.5	7.7	14.2	22.1	31.3
BV/Share	14.2	17.0	21.7	92.7	83.3	93.1	109.9	134.9
DPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payout (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valuation (x)								
P/E	415.1	223.1	75.9	91.3	194.3	83.9	49.3	33.1
Cash P/E	177.2	128.8	59.7	66.5	106.8	58.2	37.4	26.5
P/BV	58.4	48.5	38.1	8.9	9.9	8.9	7.5	6.1
EV/Sales	7.7	7.3	6.0	5.0	6.2	5.1	3.8	2.8
EV/EBITDA	77.0	75.7	51.9	41.5	86.6	49.6	31.4	22.5
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCF per share	8.4	-2.4	-0.4	-7.0	-2.8	-3.0	-0.2	-3.2
Return Ratios (%)	_		-	-	-		-	-
RoE	14.1	23.8	56.2	15.8	5.2	11.2	16.5	20.4
RoCE	15.1	12.8	22.5	12.4	5.2	10.4	14.8	18.8
RoIC	21.4	17.7	20.2	17.7	6.4	10.9	16.1	19.8
Working Capital Ratios		17.7	20.2	17.7	0.1	10.5	10.1	13.0
Fixed Asset Turnover (x)	5.7	5.6	5.9	5.6	4.2	4.1	4.6	5.2
Asset Turnover (x)	1.5	1.3	1.4	0.8	0.9	1.0	1.2	1.3
Inventory (Days)	98	120	125	166	209	185	165	165
Debtor (Days)	65	78	78	74	83	80	75	75
Creditor (Days)	87	106	83	80	79	75	75	75
Leverage Ratio (x)	07	100	05	00	15	75	75	75
Current Ratio	1.9	2.4	2.6	3.1	3.2	2.7	2.5	2.6
Interest Cover Ratio	1.1	1.9	3.2	2.7	2.4	5.1	13.8	23.9
Net Debt/Equity	2.6	2.5	2.1	-0.2	0.0	0.0	0.0	0.0
	2.0	2.5	2.1	-0.2	0.0	0.0	0.0	0.0
Consolidated - Cash Flow Statement								(INRm)
Y/E March	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	FY27E
OP/(Loss) before Tax	153	288	856	727	381	895	1,520	2,198
Depreciation	155	158	180	197	229	286	353	411
Interest & Finance Charges	434	222	209	244	113	-86	-150	-203
Direct Taxes Paid	-47	-35	-125	-189	-164	-247	-418	-553
(Inc)/Dec in WC	-121	-561	-805	-1,125	-414	-243	-819	-1,562
CF from Operations	574	72	315	-147	145	605	485	290
Others	83	-17	-158	13	28	0	0	0
CF from Operating incl EO	657	55	150	-133	173	605	485	290
(Inc)/Dec in FA	-170	-192	-177	-273	-355	-800	-500	-500
Free Cash Flow	487	-137	-21	-406	-182	-195	-15	- <b>210</b>
(Pur)/Sale of Investments	-24	29	0	0	-1,121	0	0	0
Others	-24	-104	-6	2	15	246	250	286
CF from Investments	-192	- <u>10</u> 4	-184	-271		-554	- <b>250</b>	- <b>214</b>
					-1,461			
Issue of Shares	0	73	159	798	1 5 9 0	0	0	0
Inc/(Dec) in Debt	-296	461	158	128	-1,580	-200	-400	0
Interest Paid	-426	-217	-189	-283	-88	-160	-99	-83
Dividend Paid	-4	-37	-38	-37	-41	0	0	0
Others	302	22	-138	3,915	-807	0	0	0

301

89

246

335

0

-207

-234

335

101

0

4,522

4,118

4,222

101

3

-2,508

-**3,79**6

4,219

1,065

643

-360

-309

1,065

0

756

-499

-**26**4

756

492

0

-424

204

20

266

42

**CF from Fin. Activity** 

Other cash and Cash equivalents

Inc/Dec of Cash

**Opening Balance** 

**Closing Balance** 

-83 -7

492

485

0

### Explanation of Investment Rating

Explanation of infootinone realing					
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 <u>www.motilaloswal.com</u>. 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://onlinereports.motilaloswal.com/Dormant/documents/List%2 ociate%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 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

h.raiani@motilaloswal.com Email: nair

## 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). 1 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 2. 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

- 3 Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(jes) 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.
- Research Analyst has not served as an officer, director or employee of subject company(ies). 5
- 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. 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) 8. 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 Motial Oswal only. Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEB1 and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Registrated 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: INH00000412 . 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.