

Estimate change	↔
TP change	↑
Rating change	↔

Motilal Oswal values your support in the Asiamoney Brokers Poll 2022 for India Research, Sales, Corporate Access and Trading team. We [request your ballot](#).



Bloomberg	AAVAS IN
Equity Shares (m)	78
M.Cap.(INRb)/(USD\$)	188.4 / 2.4
52-Week Range (INR)	3337 / 1839
1, 6, 12 Rel. Per (%)	6/-17/-17
12M Avg Val (INR M)	388

#### Financials & Valuations (INR b)

INR b	FY22	FY23E	FY24E
NII	6.5	7.6	9.1
PPP	4.8	5.7	7.2
PAT	3.6	4.3	5.4
EPS (INR)	45.2	54.5	68.3
EPS Gr. (%)	23	20	25
BV/Sh. (INR)	356	410	479

#### Ratios (%)

NIM	6.3	6.0	5.8
C/I ratio	42.3	42.6	39.8
Credit cost	0.27	0.20	0.22
RoA	3.6	3.5	3.6
RoE	13.7	14.2	15.4

#### Valuation

P/E (x)	52.8	43.8	34.9
P/BV (x)	6.7	5.8	5.0

#### Shareholding pattern (%)

As On	Jun-22	Mar-22	Jun-21
Promoter	39.2	39.2	50.1
DII	10.2	9.9	8.1
FII	39.0	39.9	32.1
Others	11.6	11.0	9.7

FII Includes depository receipts

**CMP: INR2,386 TP: INR2,010 (-16%) Sell**

### Confident of healthy loan growth and improvement in asset quality

#### Margin trajectory will be a key monitorable

- PAT grew 49% YoY to INR892m in 1QFY23 (in line). Elevated OPEX, with a cost-income ratio of 47%, was offset by very benign credit costs of INR9m.
- Underlying this, NII was flat QoQ and grew 20% YoY to INR1.8b (in line). Other income declined by 38% QoQ, driven by lower assignment income.
- Key highlights include: a) GS3 increased by ~10bp QoQ to ~1.1% and 1+DPD grew to 4.7% (v/s 4.5% in Mar'22); b) sequential NII growth was muted, leading to a compression of ~40bp QoQ in NIM; and c) quarterly disbursements of ~INR11b, led to AUM growth of 5% QoQ and 24% YoY, and has set the stage for a strong growth in FY23.
- We model an AUM and PAT CAGR of 23% each over FY22-24 for a RoA/RoE of 3.6%/15% in FY24. Valuations capture its growth trajectory and superior asset quality franchise. Before turning constructive, we would monitor the impact of rising interest rates on spreads and NIM and on delinquencies, if there is a significant increase in EMI for customers. We maintain our Sell rating with a TP of INR2,010 (based on 4.2x FY24E BVPS).

#### Spreads and NIM (calculated) declined QoQ

- Reported yields, CoB, and spreads were stable QoQ, but our calculated numbers suggest that there has been a decline in the core lending yields and increase in the cost of borrowings. This led to a compression in NIM.
- Reported spreads in 1QFY23 grew by ~4bp QoQ to ~5.8%. Reported NIM (including fee and other income) rose by ~75bp YoY, but declined QoQ. Calculated NIM declined by 10bp YoY and 40bp QoQ.

#### Marginal deterioration in asset quality, led by weakening in >90dpd loans

- Contrary to our expectations, there was minor asset quality deterioration, with GS3/NS3 increasing by 9bp/7bp to 1.08%/0.84%, driven predominantly by slippages of INR160m from the restructured pool of advances.
- 1+DPD grew to 4.7% (v/s 4.5% in Mar'22) and can be read as a seasonal deterioration in 1QFY23.

#### OPEX elevated in FY23, but will moderate sharply from FY24

- OPEX grew 53% YoY, led by investments in technology and salary increments effected from Apr-May'22. We model in an OPEX/assets ratio of 3.3% in FY23 (similar to FY22), but expect it to decline to 3% in FY24.

#### Highlights from the management commentary

- The management guided at AUM growth of 23-25%.
- AAVAS had raised its PLR by ~25bp from Jun'22. The NBFC will be increasing its lending rates by a further ~50bp from Aug'22. The same will immediately become effective on its entire floating-rate loan book.
- The management expects spreads to remain stable for the next two-to-three quarters.

**Abhijit Tibrewal - Research Analyst** (Abhijit.Tibrewal@MotilalOswal.com)

**Research Analyst: Nitin Aggarwal** (Nitin.Aggarwal@MotilalOswal.com) / **Parth Desai** (Parth.Desai@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](http://www.motilaloswal.com/Institutional-Equities), Bloomberg, Thomson Reuters, Factset and

**Valuations capture its superior asset quality franchise; maintain Sell**

- AAVAS has a sustainable business model that it can utilize to scale up profitably across geographies over the long term. Technology adoption and relentless focus on asset quality have made it a standout player among peers. 1+DPD remains below comfortable levels of 5%. Given the investments being made by AAVAS in sourcing, distribution, and technology, it will embark on a very strong disbursement growth trajectory in FY23. Though the NBFC (like its peers) will witness some margin and spread compression in an increasing interest rate environment, it is still better positioned (because of its liabilities mix) to take advantage of the huge opportunity in the low-ticket Housing Finance space. The stock trades at 5x FY24E P/BV and captures its strong growth potential and superior asset quality franchise. We maintain our Sell rating with a TP of INR2,010 (based on **4.2x FY24E BVPS**).

## Quarterly performance

INR m

Y/E March	FY22				FY23E				FY22	FY23E	1Q FY23E	v/s Est.
	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	2QFY23	3QFY23	4QFY23				
Interest Income	2,630	2,787	2,830	3,041	3,148	3,432	3,706	3,902	11,288	14,189	3,211	-2
Interest Expenses	1,128	1,160	1,251	1,237	1,347	1,549	1,735	1,921	4,775	6,551	1,360	-1
<b>Net Income</b>	<b>1,502</b>	<b>1,627</b>	<b>1,579</b>	<b>1,804</b>	<b>1,802</b>	<b>1,883</b>	<b>1,972</b>	<b>1,981</b>	<b>6,513</b>	<b>7,638</b>	<b>1,850</b>	<b>-3</b>
YoY Growth (%)	29	26	12	37	20	16	25	10	26	17	23	
Other income	90	468	599	612	380	553	685	662	1,768	2,281	269	41
<b>Total Income</b>	<b>1,592</b>	<b>2,095</b>	<b>2,178</b>	<b>2,416</b>	<b>2,182</b>	<b>2,436</b>	<b>2,657</b>	<b>2,643</b>	<b>8,281</b>	<b>9,918</b>	<b>2,120</b>	<b>3</b>
YoY Growth (%)	31	34	13	37	37	16	22	9	28	20	33	
Operating Expenses	673	864	910	1,059	1,026	1,037	1,066	1,100	3,506	4,230	932	10
YoY Growth (%)	28	36	37	43	53	20	17	4	37	21	39	
<b>Operating Profits</b>	<b>919</b>	<b>1,231</b>	<b>1,268</b>	<b>1,357</b>	<b>1,156</b>	<b>1,399</b>	<b>1,591</b>	<b>1,543</b>	<b>4,775</b>	<b>5,689</b>	<b>1,188</b>	<b>-3</b>
YoY Growth (%)	33	33	0	33	26	14	25	14	22.3	19.1	29	
Provisions	170	47	113	-104	9	70	90	36	226	206	59	-84
<b>Profit before Tax</b>	<b>749</b>	<b>1,183</b>	<b>1,155</b>	<b>1,461</b>	<b>1,147</b>	<b>1,329</b>	<b>1,501</b>	<b>1,507</b>	<b>4,549</b>	<b>5,483</b>	<b>1,129</b>	<b>2</b>
Tax Provisions	150	262	264	304	254	286	323	321	981	1,184	243	5
<b>Profit after tax</b>	<b>599</b>	<b>921</b>	<b>891</b>	<b>1,157</b>	<b>892</b>	<b>1,043</b>	<b>1,178</b>	<b>1,185</b>	<b>3,568</b>	<b>4,299</b>	<b>886</b>	<b>1</b>
YoY Growth (%)	20	39	4	32	49	13	32	2	23.2	20.5		
<b>Key Parameters (%)</b>												
Yield on loans	13.0	12.9	12.8	12.7	12.7				13.8	14.2		
Cost of funds	7.3	7.2	7.0	6.9	6.9				6.7	7.3		
Spread	5.7	5.7	5.8	5.8	5.8				7.1	7.0		
NIM - YTD	6.9	7.8	8.1	8.2	7.7				6.3	6.0		
Credit cost	0.9	0.2	0.5	-0.5	0.0				0.3	0.2		
Cost to Income Ratio (%)	42.3	41.2	41.8	43.8	47.0				42.3	42.6		
Tax Rate (%)	20.1	22.1	22.9	20.8	22.2				21.6	21.6		
<b>Balance Sheet Parameters</b>												
<b>AUM (INR B)</b>	<b>96.2</b>	<b>101.5</b>	<b>106.1</b>	<b>113.5</b>	<b>118.9</b>				<b>113.5</b>	<b>140.3</b>		
Change YoY (%)	21.2	21.3	20.3	20.1	23.7				20.1	23.6		
<b>AUM mix (%)</b>												
Home loans	72.7	72.1	71.6	72.1	71.1				72.1	70.8		
Mortgage loans	27.3	27.9	28.4	27.9	28.9				27.9	29.2		
<b>Loans (INR B)</b>	<b>77.6</b>	<b>82.1</b>	<b>84.8</b>	<b>90.5</b>	<b>95.9</b>				<b>90.5</b>	<b>112.2</b>		
% of AUM	80.7	80.9	79.9	79.8	80.6				20.3	23.9		
<b>Disbursements (INR B)</b>	<b>4.6</b>	<b>9.0</b>	<b>9.5</b>	<b>12.9</b>	<b>10.9</b>				<b>36.0</b>	<b>48.7</b>		
Change YoY (%)	117.1	35.3	24.4	27.1	136.5				35.6	35.2		
<b>Borrowings (INR B)</b>	<b>64.9</b>	<b>69.1</b>	<b>72.3</b>	<b>79.7</b>	<b>82.9</b>				<b>79.7</b>	<b>101.0</b>		
Change YoY (%)	14.3	14.6	11.5	25.6	27.8				25.6	26.7		
Borrowings/Loans (%)	83.6	84.1	85.3	88.1	86.4				88.1	90.0		
Debt/Equity (x)	2.6	2.7	2.7	2.8	2.9				2.8	3.1		
<b>Asset Quality (%)</b>												
<b>GS 3 (INR M)</b>	<b>894</b>	<b>795</b>	<b>1,473</b>	<b>904</b>	<b>1,045</b>				<b>904</b>	<b>1,045</b>		
G3 %	1.14	0.96	1.72	0.99	1.08				0.99	1.1		
NS 3 (INR M)	670	589	1,129	695	805				695	805		
NS3 %	0.9	0.7	1.3	0.8	0.8				0.8	0.8		
<b>PCR (%)</b>	<b>25.0</b>	<b>26.0</b>	<b>23.4</b>	<b>23.1</b>	<b>22.9</b>				<b>23.1</b>	<b>22.9</b>		
ECL (%)	0.85	0.85	0.93	0.71	0.67				0.71	0.67		
<b>Return Ratios - YTD (%)</b>												
ROA (Rep)	2.6	3.3	3.4	3.6	3.2				3.6	3.5		
ROE (Rep)	9.8	12.3	12.7	13.7	12.5				13.7	14.2		

E: MOFSL Estimates



## Highlights from the management commentary

### Guidance

- Expects spreads to remain stable for the next 2-3 quarters
- Guided for monthly disbursement run-rate of INR3.7b-4b and AUM growth of 23%-25%

### Operating expenses

- Making large investments in technology and opex will remain elevated in the same range in FY23 (as FY22) and then exhibit a 20-30bp decline in cost-ratios from FY24 onwards.

### Asset Quality

- Company had a restructured pool of ~INR1b which was classified under Stage 2. From this restructured pool, INR160m slipped into Stage 3

### AUM and disbursements

- AAVAS keeps a 40-50% additional capacity in its sales team and 15%-20% additional capacity in other teams. This has enabled it to deliver healthy disbursements even during tough times.
- Adjusted for the subsidy component, AUM growth would have been higher than 24%.

### Liability

- AAVAS had increased its PLR by ~25bp from Jun'22 onwards. Company will be increasing its lending rates by ~50bp from 5-Aug-22 and it immediately becomes effective on the entire floating-rate back book
- >90% of the bank term loans are linked to the 1-year MCLR.
- NHB borrowings of ~INR10b came at relatively low interest rates.

### Credit Rating Upgrade

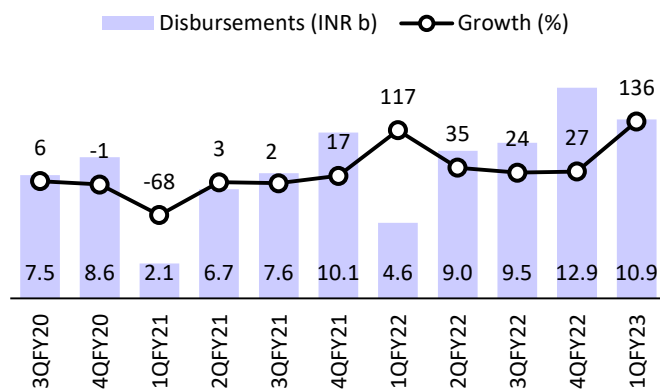
- Company received a credit rating upgrade from ICRA to AA (from AA- earlier) in Jun'22.

### Others

- Monthly BT-OUT was 0.5% of the opening AUM and for the quarter it stood at 1.58% of the opening AUM and ~6% annualized.
- Business Loans: Tenures upto 7 years, yields of 15% and the collateral is self-occupied residential property.
- Company will be opening 30-40 new branches every year
- No aspirations to venture into any other fee-based income products.

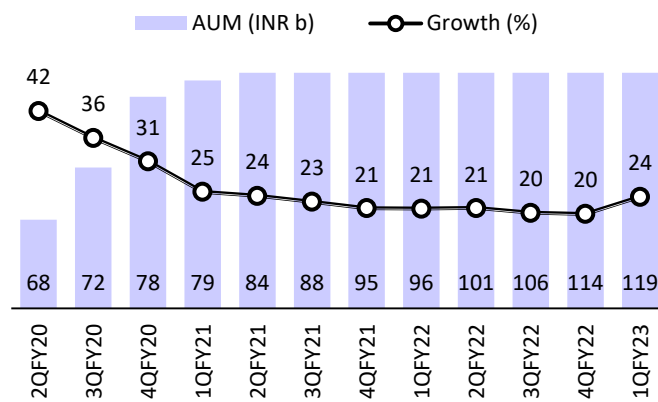
## Key exhibits

**Exhibit 1: Disbursements grew ~135% YoY...**



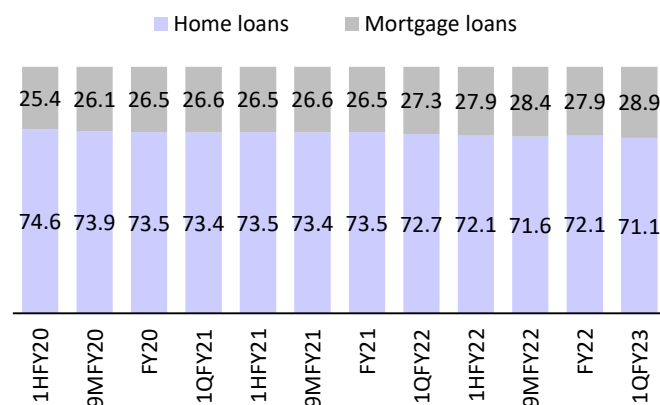
Source: MOFSL, Company

**Exhibit 2: ....while AUM grew 5% sequentially despite the component of CLSS subsidy**



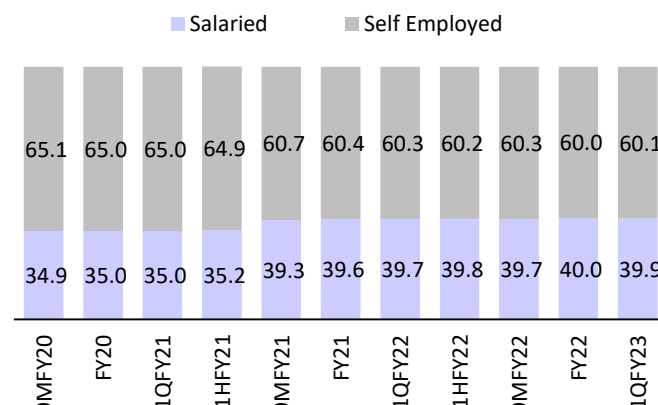
Source: MOFSL, Company

**Exhibit 3: Share of Home loans declines by 100bp QoQ (%)**



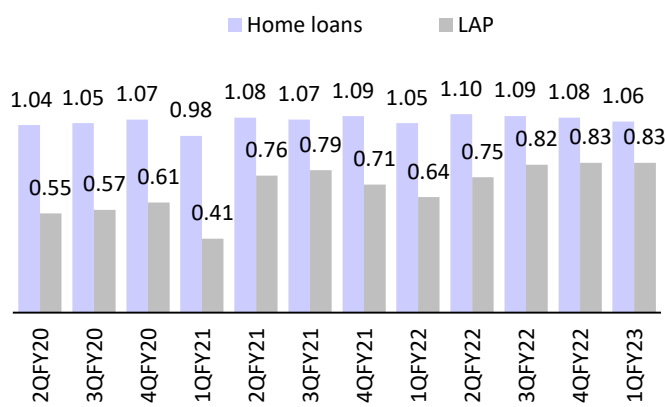
Source: MOFSL, Company

**Exhibit 4: Stable customer mix (%)**



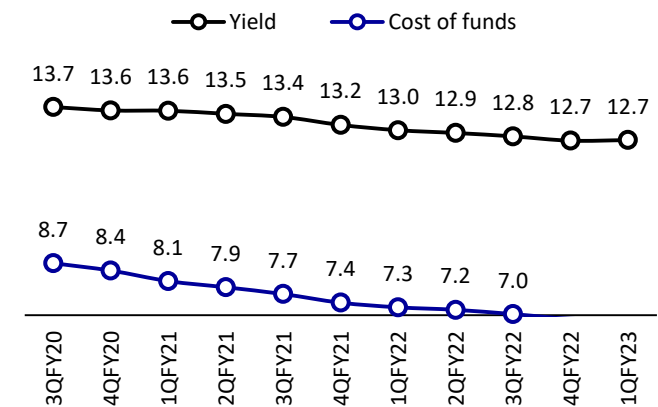
Source: MOFSL, Company

**Exhibit 5: ATS was stable QoQ (INR m)**

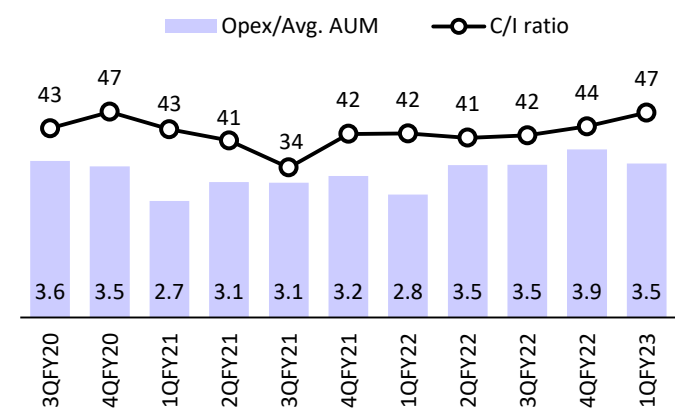


Source: MOFSL, Company

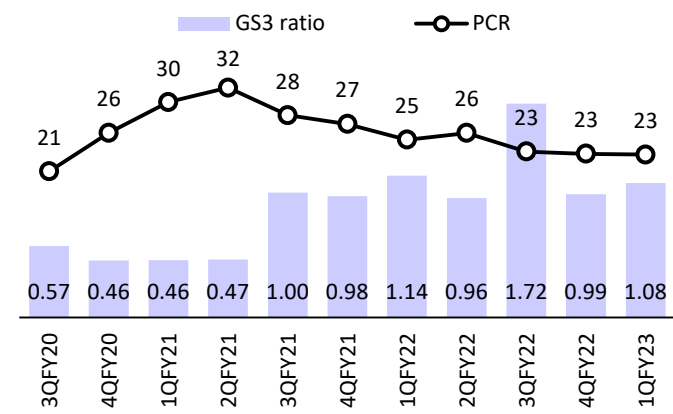
**Exhibit 6: Reported spreads were broadly stable**



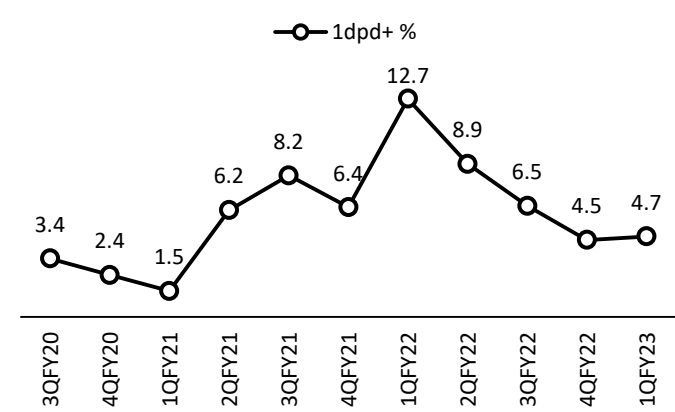
Source: MOFSL, Company

**Exhibit 7: OPEX/AUM declined to 3.5% but CIR rose to 47%**

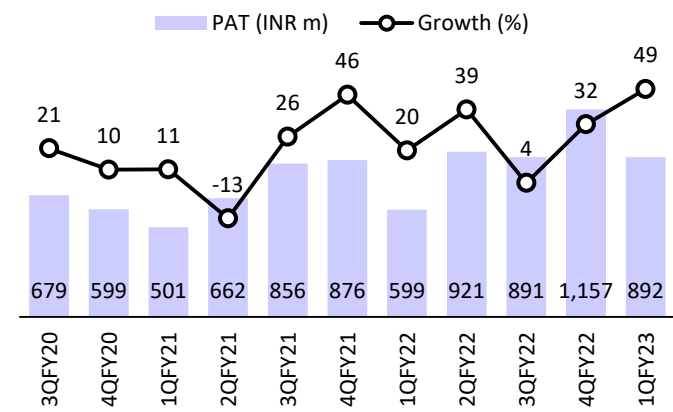
Source: MOFSL, Company

**Exhibit 8: PCR remained stable at ~23%**

Source: MOFSL, Company, PCR in %

**Exhibit 9: 1+dpd deteriorated to 4.7% but still below 5%**

Source: MOFSL, Company

**Exhibit 10: PAT grew 49% YoY led by higher NII and lower credit costs**

Source: MOFSL, Company

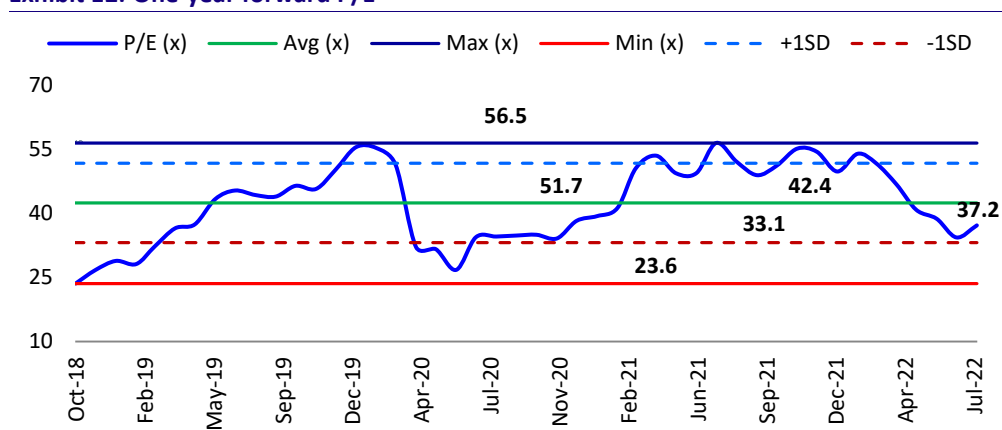
### Valuation and view

- AAVAS has a sustainable business model that it can utilize to scale up profitably across geographies over the long term. AAVAS' technology adoption and relentless focus on asset quality has made it a standout player among peers. Notably, 1+DPD remains below comfortable levels of 5%.
- Given the investments being made by AAVAS in sourcing, distribution, and technology, it will embark on a strong disbursement growth trajectory in FY23.
- Though AAVAS (like its peers) will witness some margin/spread compression in an increasing interest rate environment, it is still better positioned (because of its liabilities mix) to take advantage of the huge opportunity in the low-ticket Housing Finance space.
- The stock trades at 5x FY24E P/BV and captures its strong growth potential and superior asset quality franchise. Maintain our Sell rating with a TP of INR2,010 (based on **4.2x FY24E BVPS**).

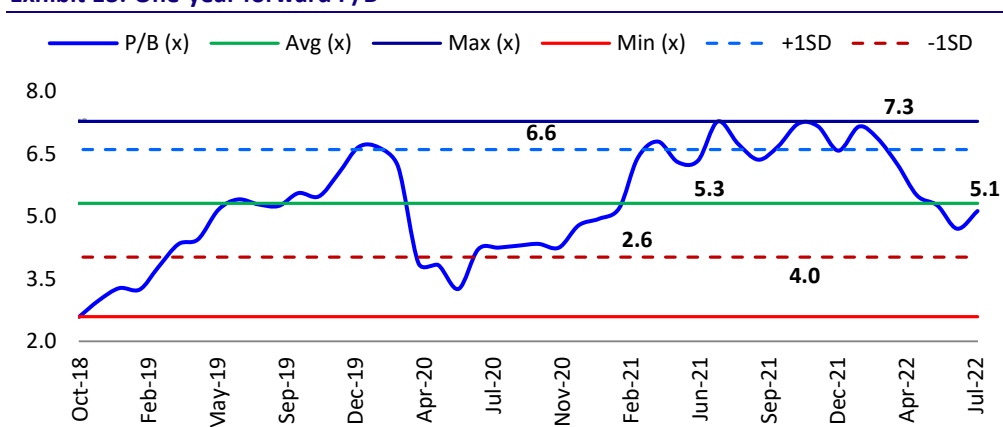
**Exhibit 11: Cut our FY24 estimate by ~2% to factor in a higher OPEX intensity**

INR b	Old Est.		New Est.		Change (%)	
	FY23E	FY24E	FY23E	FY24E	FY23E	FY24E
NII	7.6	9.1	7.6	9.1	0.6	-0.5
Other Income	2.2	2.8	2.3	2.8	2.0	1.7
<b>Total Income</b>	<b>9.8</b>	<b>11.9</b>	<b>9.9</b>	<b>11.9</b>	<b>0.9</b>	<b>0.1</b>
Operating Expenses	4.0	4.5	4.2	4.7	5.8	5.8
<b>Operating Profits</b>	<b>5.8</b>	<b>7.4</b>	<b>5.7</b>	<b>7.2</b>	<b>-2.5</b>	<b>-3.4</b>
Provisions	0.3	0.4	0.2	0.3	-34.0	-26.3
<b>PBT</b>	<b>5.5</b>	<b>7.0</b>	<b>5.5</b>	<b>6.9</b>	<b>-0.7</b>	<b>-2.2</b>
Tax	1.2	1.5	1.2	1.5	-0.7	-2.2
<b>PAT</b>	<b>4.3</b>	<b>5.5</b>	<b>4.3</b>	<b>5.4</b>	<b>-0.7</b>	<b>-2.2</b>
AUM	141	175	140	173	-0.4	-1.2
Borrowings	101	126	101	124	-0.4	-1.2
NIM (%)	6.0	5.8	6.0	5.8		
ROA (%)	3.5	3.6	3.5	3.6		
RoE (%)	14.3	15.7	14.2	15.4		

Source: MOFSL, Company

**Exhibit 12: One-year forward P/E**

Source: MOFSL, Company

**Exhibit 13: One-year forward P/B**

Source: MOFSL, Company

## Financials and valuations

Income statement								INR m	
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Interest Income	1,725	2,707	3,926	5,935	7,864	9,764	11,288	14,189	17,635
Interest Expended	969	1,428	1,931	2,554	3,561	4,582	4,775	6,551	8,562
<b>Net Interest Income</b>	<b>757</b>	<b>1,279</b>	<b>1,995</b>	<b>3,382</b>	<b>4,304</b>	<b>5,182</b>	<b>6,513</b>	<b>7,638</b>	<b>9,073</b>
Change (%)	76.3	69.0	56.0	69.5	27.3	20.4	25.7	17.3	18.8
Gain on Securitisation	0	5	602	783	766	864	1,240	1,550	1,938
Other Operating Income	244	343	417	391	401	426	528	730	879
<b>Total Income</b>	<b>1,001</b>	<b>1,627</b>	<b>3,014</b>	<b>4,556</b>	<b>5,470</b>	<b>6,471</b>	<b>8,281</b>	<b>9,918</b>	<b>11,890</b>
Change (%)	86.5	62.5	85.3	51.2	20.1	18.3	28.0	19.8	19.9
Operating Expenses	466	673	1,645	1,890	2,296	2,566	3,506	4,230	4,732
<b>Operating Income</b>	<b>535</b>	<b>953</b>	<b>1,369</b>	<b>2,666</b>	<b>3,174</b>	<b>3,905</b>	<b>4,775</b>	<b>5,689</b>	<b>7,158</b>
Change (%)	71.0	78.1	43.6	94.7	19.1	23.0	22.3	19.1	25.8
Provisions	47	67	26	89	153	371	226	206	278
<b>PBT</b>	<b>489</b>	<b>887</b>	<b>1,343</b>	<b>2,577</b>	<b>3,020</b>	<b>3,533</b>	<b>4,549</b>	<b>5,483</b>	<b>6,880</b>
Tax	168	308	412	818	529	638	981	1,184	1,486
Tax Rate (%)	34.4	34.7	30.7	31.7	17.5	18.1	21.6	21.6	21.6
<b>PAT</b>	<b>321</b>	<b>579</b>	<b>931</b>	<b>1,759</b>	<b>2,491</b>	<b>2,895</b>	<b>3,568</b>	<b>4,299</b>	<b>5,394</b>
Change (%)	68.0	80.4	60.9	89.0	41.6	16.2	23.2	20.5	25.5
Proposed Dividend	0	0	0	0	0	0	0	0	0

### Balance sheet

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
Capital	384	582	692	781	783	785	789	789	789
Reserves & Surplus	1,647	5,082	11,207	17,589	20,196	23,229	27,297	31,596	36,990
<b>Net Worth</b>	<b>2,031</b>	<b>5,663</b>	<b>11,899</b>	<b>18,370</b>	<b>20,979</b>	<b>24,014</b>	<b>28,086</b>	<b>32,385</b>	<b>37,779</b>
<b>Borrowings</b>	<b>14,572</b>	<b>17,935</b>	<b>27,376</b>	<b>36,533</b>	<b>53,520</b>	<b>63,454</b>	<b>79,725</b>	<b>1,00,991</b>	<b>1,24,325</b>
Change (%)	104.2	23.1	52.6	33.4	46.5	18.6	25.6	26.7	23.1
Other liabilities	505	908	1,126	1,366	2,081	2,132	2,392	2,632	2,895
<b>Total Liabilities</b>	<b>17,108</b>	<b>24,507</b>	<b>40,401</b>	<b>56,268</b>	<b>76,580</b>	<b>89,600</b>	<b>1,10,204</b>	<b>1,36,008</b>	<b>1,64,999</b>
<b>Loans</b>	<b>14,702</b>	<b>21,638</b>	<b>33,334</b>	<b>47,245</b>	<b>61,808</b>	<b>75,233</b>	<b>90,534</b>	<b>1,12,212</b>	<b>1,38,139</b>
Change (%)	75.9	47.2	54.1	41.7	30.8	21.7	20.3	23.9	23.1
<b>Investments</b>	<b>0</b>	<b>8</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>675</b>	<b>675</b>	<b>675</b>
Change (%)	NM	NM	NM	0.0	0.0	0.0	1,400.4	0.0	0.0
Other assets	2,405	2,861	7,022	8,978	14,727	14,323	18,994	23,120	26,185
<b>Total Assets</b>	<b>17,108</b>	<b>24,507</b>	<b>40,401</b>	<b>56,268</b>	<b>76,580</b>	<b>89,600</b>	<b>1,10,204</b>	<b>1,36,008</b>	<b>1,64,999</b>

E: MOFSL Estimates



## Financials and valuations

Ratios									(%)
Y/E March	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E
<b>Spreads Analysis (%)</b>									
Avg Yield on Loan portfolio	15.0	14.8	14.2	13.9	13.5	14.1	13.8	14.2	14.3
Avg. Cost of borrowings	8.9	8.8	8.5	8.0	7.9	7.8	6.7	7.3	7.6
Interest Spread	6.0	6.1	5.7	5.9	5.6	6.3	7.1	7.0	6.7
Net Interest Margin (AUM)	6.0	5.8	5.9	6.8	6.3	6.0	6.3	6.0	5.8
<b>Profitability Ratios (%)</b>									
RoE	21.1	15.0	10.6	11.6	12.7	12.9	13.7	14.2	15.4
RoA	2.5	2.8	2.9	3.6	3.8	3.5	3.6	3.5	3.6
Loans/Equity (x)	7.2	3.8	2.8	2.6	2.9	3.1	3.2	3.5	3.7
Cost/Income	46.5	41.4	54.6	41.5	42.0	39.7	42.3	42.6	39.8
<b>Asset Quality (%)</b>									
Gross NPAs	80	169	107	158	210	739	904	1,114	1,297
Gross NPAs to Adv.	0.6	0.8	0.3	0.3	0.3	1.0	1.0	1.0	0.9
Net NPAs	62	129	83	112	171	538	695	847	986
Net NPAs to Adv.	0.4	0.6	0.2	0.2	0.3	0.7	0.8	0.8	0.7
<b>VALUATION</b>									
Book Value (INR)	53	97	172	235	268	306	356	410	479
<b>Price-BV (x)</b>						<b>7.8</b>	<b>6.7</b>	<b>5.8</b>	<b>5.0</b>
EPS (INR)	8.4	9.9	13.5	22.5	31.8	36.9	45.2	54.5	68.3
EPS Growth YoY	44	19	35	67	41	16	23	20	25
<b>Price-Earnings (x)</b>						<b>64.7</b>	<b>52.8</b>	<b>43.8</b>	<b>34.9</b>
Dividend per share (INR)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dividend yield (%)</b>						<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
E: MOFSL Estimates									

NOTES

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

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

#### Disclosures

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

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Investment Advisory Services, Depository participant services & distribution of various financial products. MOFSL is a subsidiary company of Passionate Investment Management Pvt. Ltd.. (PIMPL). MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://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](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

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

#### For Hong Kong:

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

#### For U.S.

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

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

#### For Singapore

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

#### Specific Disclosures

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

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company
- received compensation/other benefits from the subject company in the past 12 months
- other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.

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

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

#### Analyst Certification

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

#### Terms & Conditions:

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

#### Disclaimer:

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

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

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

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