

AU Small Finance Bank

BSE SENSEX
55,464

S&P CNX
16,595

CMP: INR1,162

TP: INR1,550 (+33%)

Buy



Stock Info

	AUBANK IN
Bloomberg	AUBANK IN
Equity Shares (m)	314
M.Cap.(INRb)/(USD\$b)	364.6 / 4.8
52-Week Range (INR)	1421 / 910
1, 6, 12 Rel. Per (%)	-10/4/-16
12M Avg Val (INR M)	1860
Free float (%)	71.7

Financials Snapshot (INR b)

Y/E March	FY22E	FY23E	FY24E
NII	31.8	42.2	54.7
PPoP	18.2	24.8	32.9
PAT	10.9	15.0	20.0
NIM (%)	5.5	5.7	5.8
EPS (INR)	34.9	48.2	64.0
EPS Gr (%)	-8.0	37.9	32.7
BV/Sh. (INR)	233	281	345
ABV/Sh. (INR)	225	272	335

Ratios

RoE (%)	16.2	18.8	20.4
RoA (%)	1.9	2.0	2.1

Valuations

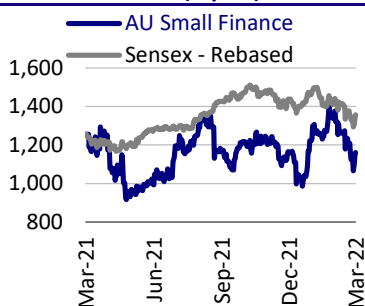
P/E (x)	33.2	24.1	18.2
P/BV (x)	5.0	4.1	3.4
P/ABV (x)	5.2	4.3	3.5

Shareholding pattern (%)

As On	Dec-21	Sep-21	Dec-20
Promoter	28.3	28.4	29.0
DII	20.0	20.9	18.9
FII	33.2	32.5	32.8
Others	18.5	18.3	19.3

FII Includes depository receipts

Stock Performance (1-year)



Wheels and Home loans are the key business drivers

Technology initiatives/deeper penetration to lead the next leg of growth

We attended AUBANK's virtual meet where the management highlighted how the improved digital capabilities are helping the bank transform by driving business growth, while delivering superior customer experience. AUBANK has divided its business into 10 SBUs, where each SBU will have its own structure/growth strategy underpinned by shared verticals and support functions. In today's session, the bank dwelled upon its two critical SBU's – Wheels and Home loans. The bank has been working on scaling up its digital banking across product range, which is aiding sustainable growth. Please find below the key takeaways from the session:

Session 1: Wheels by Mr. Bhaskar Karkera (Chief of Wheels) and team About the automobile industry

- Strong push from the government for roads/other wheels-related infrastructure in the budget
- Indian Automobile Sector:** 7.1% share in India's GDP (INR13t – 49% of Manufacturing GDP, ~4.9% share (INR1.88t) in FDI inflows, 4.3% share (INR3.5t) in exports
- ~0.5m, electric cars are expected to be sold in FY27
- CNG segment is making inroads with 19% share in CV segment and 7.6% share in PV segment as on Dec'21
- All business segments (barring tractors) across industry are likely to grow in double digits. Growth across products – New Cars (~10%), Used Cars (~16%), CV (~17%), Tractors (~4.5%) and 2Ws (~1.2%).
- New car penetration is likely to increase to 80% by FY25 from 77% in FY21 while the mix of Non-metro is likely to rise to 45% by FY25 from 30%/35% in FY17/FY21, respectively.
- Car density in India remains much lower at 22 cars per thousand v/s 200 for China and 750 for the US
- More than 70% of used cars are below the ticket size of INR0.5m
- Used-to-new car ratio is likely to increase to 1.8 by FY25 from 1.4 in FY21
- Used car penetration is likely to improve to 35% by FY25 from 21% in FY21, while mix of Non-metro is likely to improve to 55% by FY25 from 48% in FY21
- The share of organized sector is likely to rise to 45% by FY25 from 25% in FY21

About AU Bank's book

- Partnership with HDFC Bank taught a lot and allowed AU Bank to build and manage the book and achieve process orientation.
- Granular book with ~670k accounts, Avg. tenor of 40 months, Avg. EMI of INR12-13k, Avg. LTV of 80%, ATS of INR2.7lacs and 95% of customers have exposure of <INR1m
- Product Mix:** Personal (~44%), Commercial Loading (~26%), Commercial Passenger (~17%) Tractors (9%) and CE (4%)

Nitin Aggarwal- Research Analyst (Nitin.Aggarwal@MotilalOswal.com)

Yash Agarwal - Research Analyst (Yash.Agarwal@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.

- School buses form ~ 2.5% of the book while the mix of Ola/Uber is less than 1%.
- **Top 5 OEMs contribute ~78%:** Maruti (31%), Mahindra (27%), Tata (8%), Hyundai (7%) and Toyota (5%)
- **Product mix** – New Cars (54%), Used Cars (35%), Tractors (9%) and 2Ws (2%)
- Cash on wheels comprises 7-8% of the total book
- **Geographical mix:** Rajasthan (32%), Maharashtra/Goa (17%), Madhya Pradesh (15%) and Gujarat (13%)
- The bank has 74% presence in core geographies while 26% is in urban areas
- Overall book reported 25% CAGR over FY17-Dec'21 while Rajasthan book grew at 18%. Thus, other states grew much faster, which resulted in geographical diversification.
- Monthly new vehicle sales (ex of 2W) stand at ~425k units with AU being present in states having ~210k units. Market share for AUBANK in Rajasthan is just 8%, while it is in low-single digits across other geographies. Thus, there remains ample scope for future growth.
- **Acquisition mix:** Dealers (54%), Direct Sourcing (26%), and DSA (8%), while the rest is others.
- ~0.1m customers are being added on a monthly basis and thus there remains scope for cross-selling
- **Customer mix:** Mix of NTC is ~34% within AUM and 27% in new sourcing over 9MFY22. Further, customer with credit score of >700 is 45% within AUM and 56% in new sourcing over 9MFY22.
- GNPA in the wheels business stands at 3.4%; gradually moving towards the Pre-COVID levels

Session 2: Housing Loans – Mr. Ashish Gorecha (Business Head – Home Loans) and Mr. Ronak Jain (Head – Credit, Home Loans)

About the housing industry

- The market is likely to reach USD1t by 2030 from USD180b in FY20 at 19% CAGR
- Housing loan segment is likely to contribute 13% of total GDP by 2025
- Residential segment contributes ~80% of total market
- Overall, the home loan market stands at INR22.4t and affordable housing (<INR3.5m) at INR13t
- 95% of Housing shortage in India is within the economically weaker sections (45%) and Lower Income Groups (50%)

About AU Bank's book

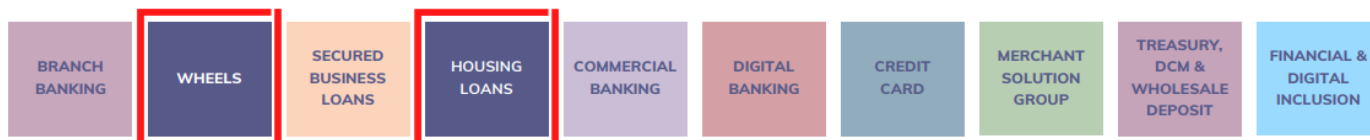
- **Product mix:** 89% is Housing portfolio while 11% is Non-Housing
- Complete Housing loan book is linked to EBLR primarily repo rate
- **Acquisition mix:** Direct Sourcing (70%), Employee Referral (11%), Branch Banking (4%) and Referrals (15%). The bank is further looking to explore other alternatives such as DSA etc.
- **Geographical mix:** Rajasthan (44.5%), Madhya Pradesh (27.6%), Gujarat (10.4%), Punjab (7.2%) and Maharashtra (6.1%)
- ~19,500 customers with Avg. Ticket size of INR10.97lacs, Avg. tenor of 194 months, Avg. EMI of INR10.65k, WIRR of 11.54%, Avg. LTV of 52%, PSL mix is 71%.
- NPA in home loans stands at 0.61%

- **Customer Mix** – ETB is 23% while NTB is 77%. Salaried (39%) and Self-employed (61%). NTC is 25% while customers with credit score of >700 is 62%
- 67% of the book is in core geographies while 33% is in urban regions

Valuation and view: On track to deliver superior growth; maintain BUY

AUBANK has been reporting a strong operating performance and robust business growth while asset quality has been particularly resilient amid a challenging economic environment. With an improvement in economic activity (as reflected by key economic indicators – GST collections, GDP growth, and PMI), the bank appears on track to deliver superior growth while retail deposit mix continues to improve supporting the margin profile. Collection efficiency stands healthy at 106% and the bank carries contingent reserves of INR3b (75bp of loans), which provides further comfort. We estimate AUBANK to deliver ~35% earnings CAGR over FY22-24, while RoA/RoE improves to 2.1%/20.4% in FY24E. **We maintain our BUY rating with a TP of INR1,550 (premised on 4.5x FY24E BV), implying 33% potential upside.**

Exhibit 1: Identified 10 SBUs to drive future growth strategy



- 10 Business Groups (SBU structures) formalized to drive future growth
- We will cover the 2 SBUs – **Wheels** and **Housing Loans** today
- Each BU to have
 - Its own vertical structure supported by shared horizontals like HR, Finance, MIS etc.
 - Its own growth strategy and approach to drive Bank's long-term Objectives and Strategic Priorities
 - Its own Revenue and Cost tracking



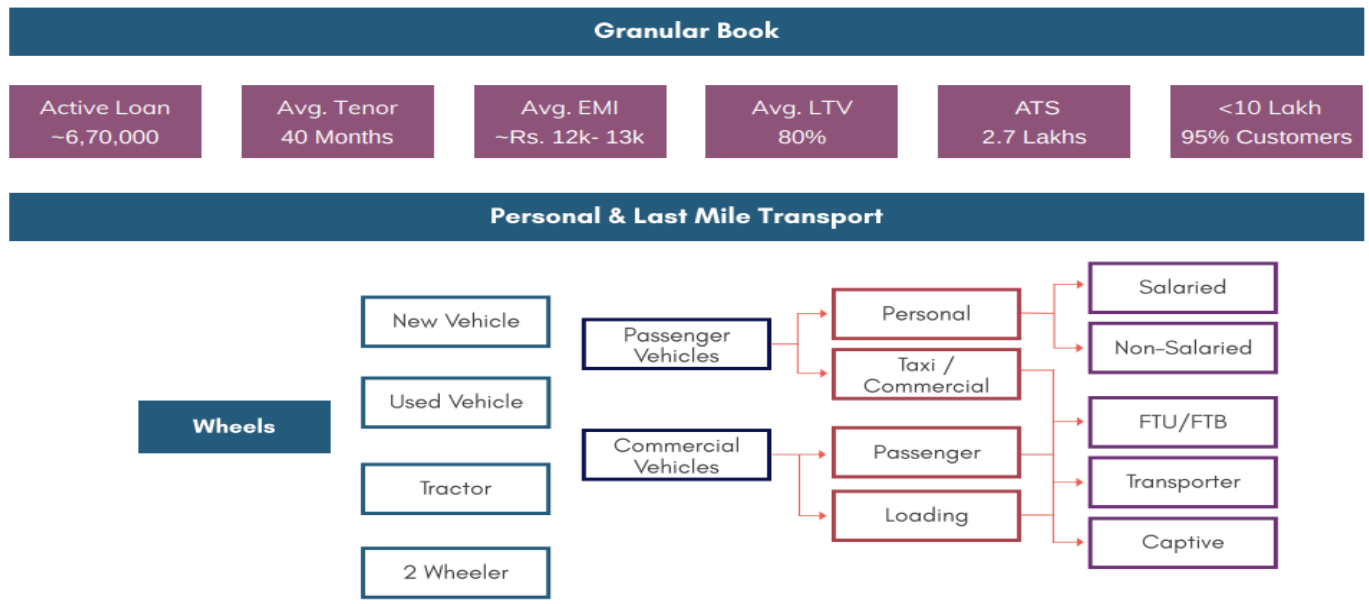
Source: MOFSL, Company

Exhibit 2: Creating a diversified space with superior value proposition



Source: MOFSL, Company

Exhibit 3: Seasoned retail franchise with focus on building a granular book



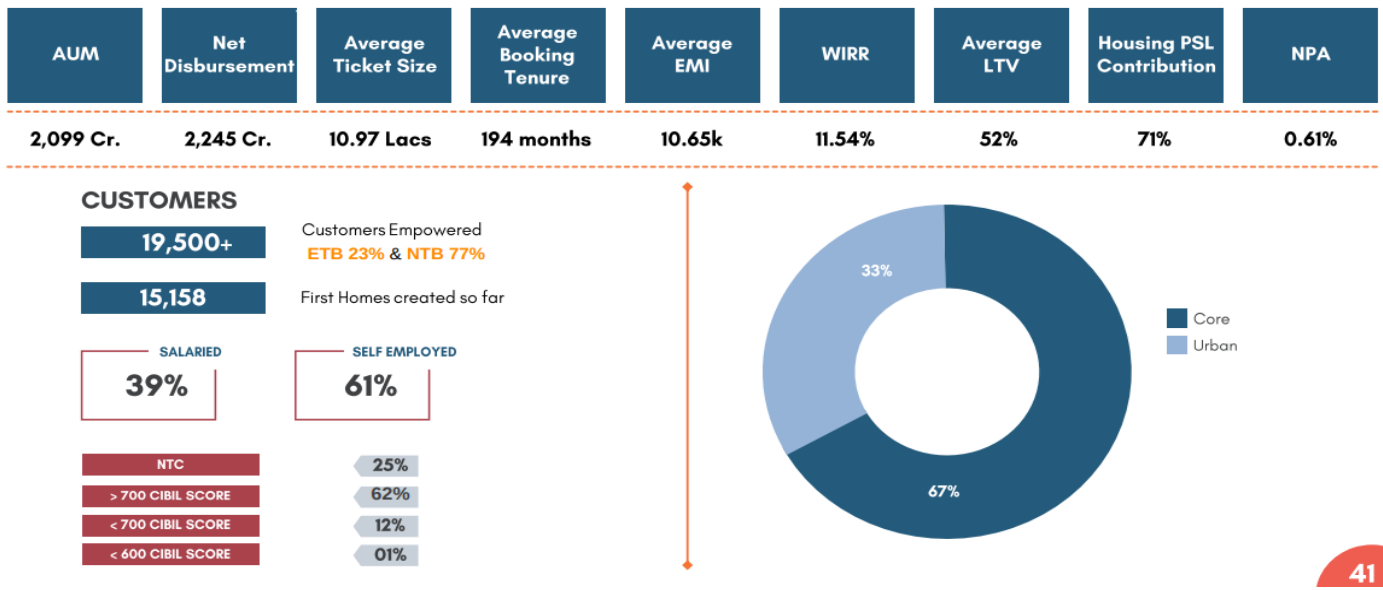
Source: MOFSL, Company

Exhibit 4: Focus remains on creating Digital Wheels



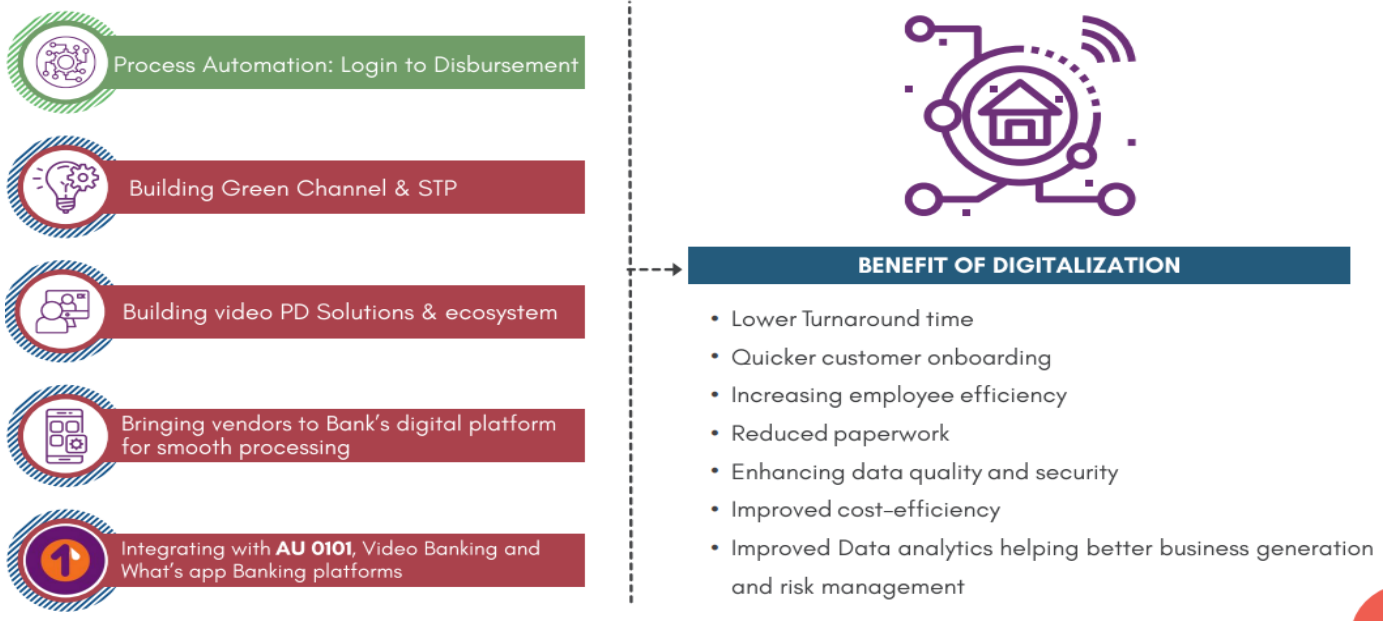
Source: MOFSL, Company

Exhibit 5: Home loans – Portfolio details



Source: MOFSL, Company

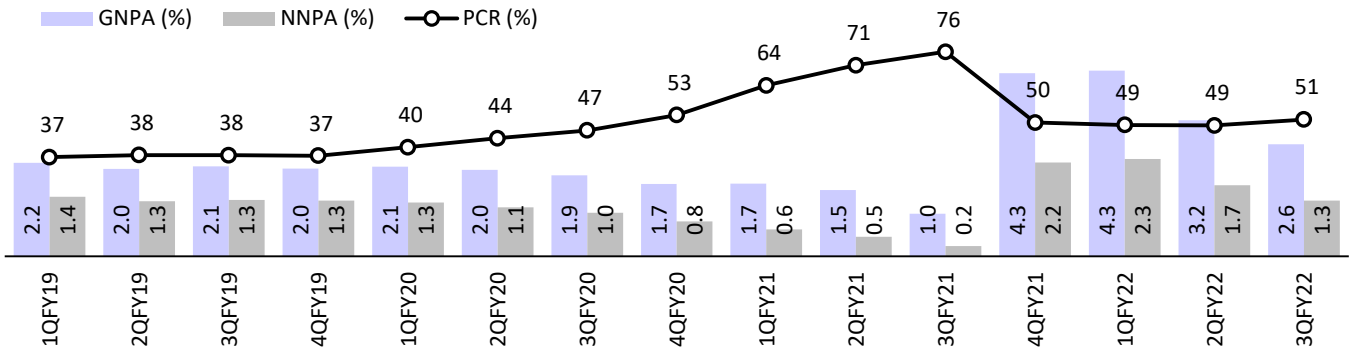
Exhibit 6: Digitalizing Home loan



Source: MOFSL, Company

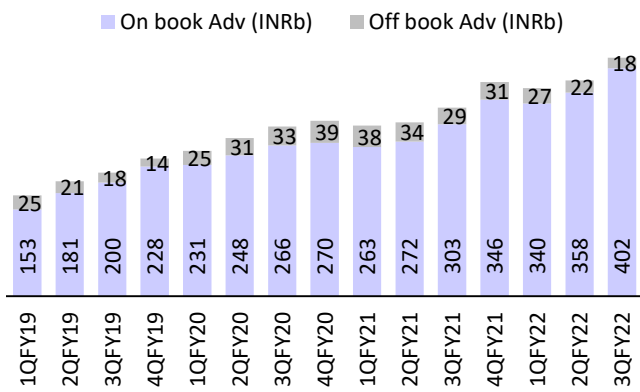
Story in charts

Exhibit 7: PCR increases to ~51%; GNPA/NNPA ratio declines by 56bp/36bp QoQ to 2.6%/1.29% in Dec'21, respectively



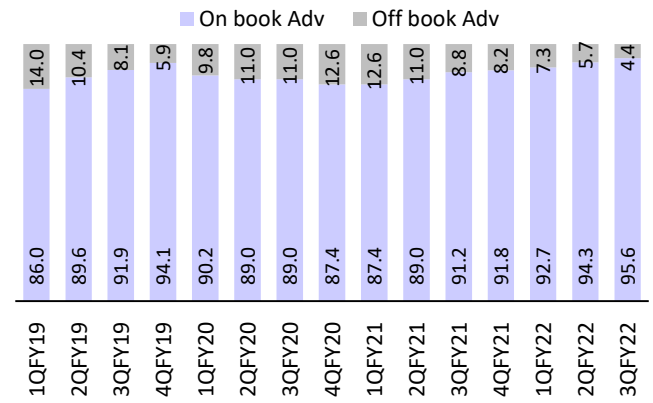
Source: Company, MOFSL

Exhibit 8: Overall AUM grew 26% YoY (+10.6% QoQ)



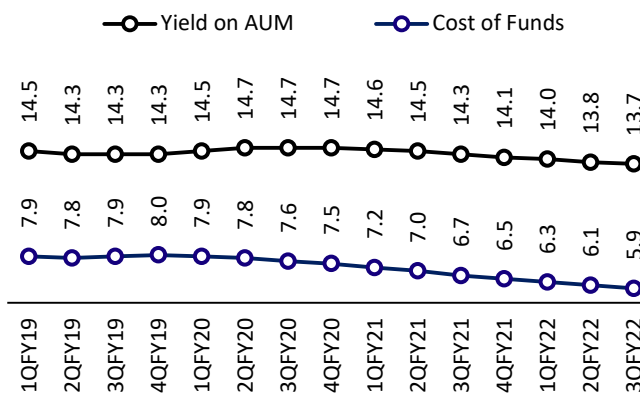
Source: Company, MOFSL

Exhibit 9: Mix of on-book advances increased to ~96% (%)



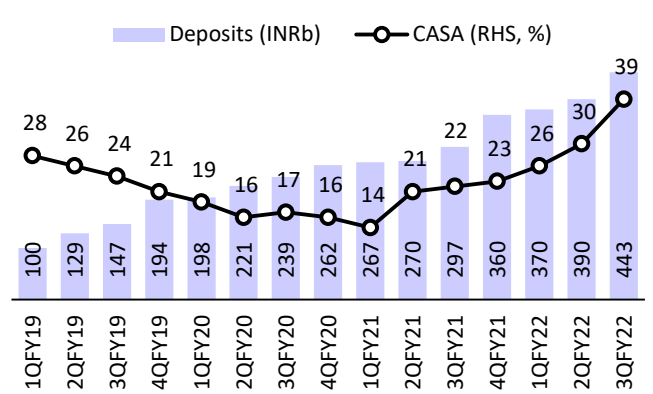
Source: Company, MOFSL

Exhibit 10: Yields on AUM declines 10bp QoQ, while cost of funds improves 20bp QoQ to 5.9%



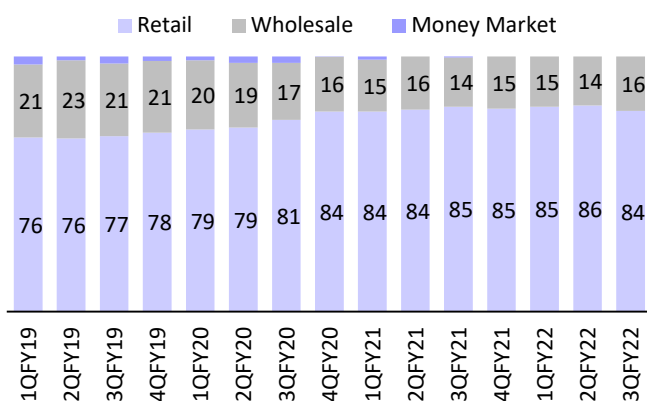
Source: Company, MOFSL

Exhibit 11: Robust traction in deposit mobilization (~49% YoY); CASA ratio increases ~39%



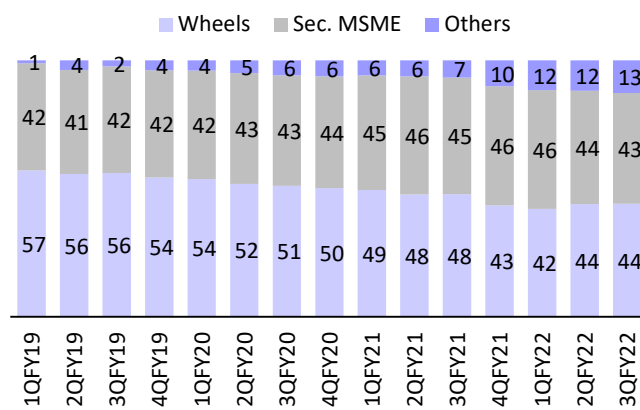
Source: Company, MOFSL

Exhibit 12: Retail mix dominates with a share of ~84%



Source: Company, MOFSL

Exhibit 13: Vehicles and MSME form ~87% of retail loans



Source: Company, MOFSL

Valuation and view: On track to deliver superior growth; maintain BUY

- The management’s focus is on scaling up its key business lines of Vehicle Loans / MSME Loans. It aims to expand the new segments of Housing Loans, Gold Loans, Consumer Durable Financing, and Credit Cards, among others. Growth has picked up over the last few quarters, with demand accruing across segments. We expect a 30% CAGR in loan growth over FY21-24.
- AUBANK has shown a strong progress in building a granular liability franchise, with the proportion of deposits to overall funding constantly improving. The proportion of retail TD rose to 51%; CASA plus retail TD increased to 70% and is expected to grow further as customer vintage increases. Yields are improving. Along with moderation in cost of funds, this is likely to support margins going forward.
- The bank witnessed continuous improvement in asset quality as GNPA/NNPA improved 56bp/36bp QoQ to 2.6%/1.3%, supported by higher reductions. Collection efficiency remained healthy at 107% in Dec’21 and 106% in 3QFY22. The total restructuring book declined to INR12.63b (~3.1% of total loans v/s 3.6% in Sep’21), on which the management made provisions of INR2.05b. The bank carries additional contingent provisions of INR3.0b (0.75% of loans). Thus, we estimate credit costs at 0.9% over FY22-24E.
- **Maintain BUY with a TP of INR1,550:** AUBANK has been reporting a strong operating performance and robust business growth while asset quality has been particularly resilient amid a challenging economic environment. With an improvement in economic activity (as reflected by key economic indicators – GST collections, GDP growth, and PMI), the bank appears on track to deliver superior growth while retail deposit mix continues to improve supporting the margin profile. Collection efficiency stands healthy at 106% and the bank carries contingent reserves of INR3b (75bp of loans), which provides further comfort. We estimate AUBANK to deliver ~35% earnings CAGR over FY22-24E, while RoA/RoE improves to 2.1%/20.4% in FY24E. **We maintain BUY with a TP of INR1,550 (premised on 4.5x FY24E BV).**

Exhibit 14: DuPont Analysis | Expect return ratios to increase gradually

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Interest Income	12.35	11.46	11.46	10.56	10.79	10.81	10.79
Interest Expense	5.78	6.24	6.36	5.51	5.34	5.11	5.03
Net Interest Income	6.57	5.22	5.11	5.05	5.45	5.70	5.77
Core Fee	2.45	1.71	1.43	1.21	1.41	1.40	1.42
Non-Interest income	2.71	1.80	1.89	3.10	1.69	1.76	1.79
Total Income	9.29	7.01	7.00	8.14	7.14	7.45	7.55
Operating Expenses	5.26	4.21	3.79	3.54	4.02	4.10	4.08
Employee cost	2.97	2.34	2.03	2.09	2.35	2.37	2.35
Others	2.29	1.87	1.76	1.45	1.67	1.73	1.73
Operating Profits	4.03	2.81	3.20	4.61	3.12	3.35	3.47
Core operating Profits	3.76	2.72	2.74	2.72	2.84	2.99	3.10
Provisions	0.93	0.55	0.76	1.49	0.63	0.64	0.65
NPA	0.39	0.29	0.17	1.08	0.58	0.58	0.59
Others	0.53	0.26	0.58	0.41	0.05	0.05	0.06
PBT	3.10	2.25	2.44	3.11	2.50	2.71	2.82
Tax	1.06	0.77	0.64	0.61	0.63	0.68	0.71
RoA	2.04	1.48	1.81	2.50	1.87	2.03	2.11
Leverage (x)	6.7	9.5	10.0	8.9	8.7	9.2	9.7
RoE	13.7	14.0	18.0	22.3	16.2	18.8	20.4

Source: MOFSL, Company

Financials and valuations

Income Statement							(INR m)
Y/E MARCH	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Interest Income	17,672	29,488	42,859	49,501	62,985	80,104	102,323
Interest Expense	8,267	16,064	23,769	25,846	31,147	37,893	47,662
Net Interest income	9,405	13,425	19,089	23,654	31,838	42,211	54,661
Growth (%)	20.0	42.7	42.2	23.9	34.6	32.6	29.5
Other Income	3,881	4,620	7,061	14,515	9,871	13,029	16,938
Total Income	13,285	18,045	26,150	38,170	41,709	55,240	71,598
Growth (%)	-16.6	35.8	44.9	46.0	9.3	32.4	29.6
Operating Expenses	7,526	10,826	14,179	16,584	23,468	30,409	38,729
Growth (%)	113.3	43.8	31.0	17.0	41.5	29.6	27.4
Operating Profits	5,759	7,219	11,972	21,586	18,241	24,831	32,870
Growth (%)	-53.6	25.3	65.8	80.3	-15.5	36.1	32.4
Core Operating Profits	5,377	6,998	10,246	12,737	16,597	22,141	29,369
Growth (%)	-4.8	30.1	46.4	24.3	30.3	33.4	32.6
Total Provisions	1,326	1,418	2,832	7,001	3,655	4,716	6,176
PBT	4,433	5,801	9,140	14,585	14,586	20,116	26,694
Tax	1,513	1,983	2,392	2,878	3,676	5,069	6,727
Tax Rate (%)	34.1	34.2	26.2	19.7	25.2	25.2	25.2
PAT	2,920	3,818	6,748	11,707	10,910	15,047	19,967
Growth (%)	-64.5	30.7	76.7	73.5	-6.8	37.9	32.7
Adj. PAT	2,920	3,818	5,962	6,002	10,910	15,047	19,967
Growth (%)	-12.4	30.7	56.2	0.7	81.8	37.9	32.7
Balance Sheet							
Y/E MARCH	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Equity Share Capital	2,857	2,924	3,041	3,122	3,122	3,122	3,122
Reserves & Surplus	19,955	28,705	40,206	58,599	69,509	84,556	104,522
Equity Net worth	22,812	31,629	43,247	61,721	72,631	87,678	107,645
Deposits	79,233	194,224	261,639	359,793	492,917	640,792	833,029
Growth (%)	NA	145%	35%	38%	37.0%	30.0%	30.0%
Borrowings	76,389	86,134	103,353	70,297	59,752	71,703	89,629
Other liabilities	9,894	14,241	12,670	23,071	25,378	29,185	34,438
Total Liabilities	188,328	326,228	421,431	515,913	651,709	830,388	1,065,771
Current Assets	17,612	17,402	33,697	47,813	51,773	59,406	69,382
Investments	30,506	71,617	106,682	108,154	140,600	179,968	224,961
Growth (%)	41.9	134.8	49.0	1.4	30.0	28.0	25.0
Loans	133,121	228,187	269,924	346,089	444,432	573,792	752,970
Growth (%)	103.2	71.4	18.3	28.2	28.4	29.1	31.2
Net Fixed Assets	3,861	4,470	4,480	4,824	5,547	6,379	7,336
Other assets	3,227	4,552	6,648	9,033	9,356	10,842	11,123
Total Assets	188,328	326,228	421,431	515,913	651,709	830,388	1,065,771
Total Assets (incl. off BS)	215,586	340,501	460,437	546,944	675,100	854,296	1,089,059
Asset Quality							
Y/E MARCH	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
GNPA (INR m)	2,697	4,701	4,578	15,028	9,842	12,168	15,701
NNPA (INR m)	1,693	2,945	2,173	7,555	4,726	5,203	5,960
GNPA Ratio	2.0	2.1	1.7	4.3	2.2	2.1	2.1
NNPA Ratio	1.3	1.3	0.8	2.2	1.1	0.9	0.8
Slippage Ratio	2.1	2.5	2.5	4.2	2.3	2.1	2.0
Credit Cost	1.0	0.6	1.0	2.1	0.9	0.9	0.9
PCR (Excl Tech. write off)	37.2	37.4	52.5	49.7	52.0	57.2	62.0

Financials and valuations

Ratios

Y/E MARCH	FY18	FY19	FY20	FY21	FY22E	FY23E	FY24E
Yield and Cost Ratios (%)							
Avg. Yield - on IEA	13.1	12.1	12.1	11.2	11.4	11.4	11.3
Avg. Yield on loans	9.4	11.7	12.4	11.5	12.4	12.5	12.5
Avg. Cost of funds	7.3	7.4	7.4	6.5	6.3	6.0	5.8
NIM (On total assets)	6.6	5.2	5.1	5.0	5.5	5.7	5.8
NIM (On IEA)	7.0	5.5	5.4	5.3	5.8	6.0	6.0

Capitalization Ratios (%)

CAR	19.3	19.3	22.0	23.4	21.0	19.2	17.8
Tier I	18.4	16.0	18.4	21.5	19.7	18.4	17.2
Tier II	0.9	3.4	3.6	1.8	1.3	0.9	0.6

Business and Efficiency Ratios (%)

Loan/Deposit Ratio	168.0	117.5	103.2	96.2	90.2	89.5	90.4
CASA Ratio	26.9	18.5	14.5	23.0	32.5	34.3	35.4
Cost/Assets	5.3	4.2	3.8	3.5	4.0	4.1	4.1
Cost/Total Income	56.7	60.0	54.2	43.4	56.3	55.0	54.1
Cost/Core Income	58.3	60.7	58.1	56.6	58.6	57.9	56.9
Int. Expense/Int. Income	46.8	54.5	55.5	52.2	49.5	47.3	46.6
Fee Income/Total Income	26.3	24.4	20.4	14.8	19.7	18.7	18.8
Non Int. Income/Total Income	29.2	25.6	27.0	38.0	23.7	23.6	23.7
Investment/Deposit Ratio	38.5	36.9	40.8	30.1	28.5	28.1	27.0
Empl. Cost/Total Expense	56.5	55.5	53.6	59.1	58.5	57.8	57.6

Profitability and Valuations

RoE	13.7	14.0	18.0	22.3	16.2	18.8	20.4
RoA (On Bal. Sheet)	2.0	1.5	1.8	2.5	1.9	2.0	2.1
RoRWA	2.5	2.0	3.0	4.2	3.0	3.2	3.2
Book Value (INR)	79.8	108.2	142.2	197.7	232.6	280.8	344.8
Growth (%)	14.2	35.5	31.4	39.0	17.7	20.7	22.8
Price-BV (x)	14.5	10.7	8.2	5.9	5.0	4.1	3.4
Adjusted BV (INR)	76.3	102.6	138.9	184.1	225.3	272.5	334.7
Growth (%)	12.0	34.5	35.4	32.5	22.4	20.9	22.8
Price-ABV (x)	15.2	11.3	8.4	6.3	5.2	4.3	3.5
EPS (INR)	10.2	13.2	22.6	38.0	34.9	48.2	64.0
Growth (%)	-79.5	28.9	71.3	67.9	-8.0	37.9	32.7
Price-Earnings (x)	113.4	87.9	51.3	30.6	33.2	24.1	18.2

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

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

Disclosures

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

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

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

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

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

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

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

For Singapore

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

Specific Disclosures

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

The associates of MOFSL may have:

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

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

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

Analyst Certification

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

Terms & Conditions:

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

Disclaimer:

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

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

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

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