

Balance sheet robust; RoA to surpass 1.1% in FY27E

NIM to remain stable in 2Q and improve thereafter

We met with the top management of Punjab National Bank (PNB), represented by Shri. Ashok Chandra, MD & CEO, to discuss the bank's business outlook, profitability goals, and other key focus areas. The following are the key takeaways from the discussion:

Anchoring growth with a balanced portfolio

PNB reiterated its FY26 loan growth guidance at 11–12%, with management highlighting strong traction across the Retail and MSME segments (+18% YoY). MSME growth is supported by cash-flow-based lending and digital initiatives, where NPAs are contained at ~1%. The corporate sanction pipeline remains strong at ~INR1.3t, though disbursements remain tepid, and the bank is hopeful of improved corporate demand in 2Q as the GST rate cut revs up economic activity. Management remains cautious on aggressive corporate pricing while prioritizing high-yielding RAM, which is expected to rise to 57–59% of loans (vs. 56.6% currently). The IBPC rundown (down from INR627b in Dec'24 to INR400b now) will weigh on reported retail growth, though core retail growth momentum remains healthy. The CD ratio remains in control at ~71%, and the bank is expected to maintain this in a tight range. We estimate PNB to deliver a 12.8% CAGR in the loan book over FY25-28.

Punjab National Bank



Shri. Ashok Chandra, MD & CEO

Shri Chandra, the MD & CEO of PNB since Jan'25, is a veteran banker with over 33 years of experience. He previously served as the ED at Canara Bank, overseeing critical verticals including Digital Banking, MSME, and Retail Assets. He earlier held leadership roles at Union Bank. With a Master's in Economics and Certified Associate of IIB, he also completed the Banks Board Bureau–IIM Bangalore leadership program.

RAM remains the key growth driver; corporate sanction pipeline healthy at ~INR1.35t, though disbursement rate remains tepid

A decisive pivot towards RAM is underway, with RAM mix expected to rise to ~57–59% from 56.6% currently. Management is consciously rebalancing away from low-yield IBPCs, which had previously inflated the retail book but offered little yield, while on the funding side, the bank is consciously pruning down the mix of CDs. Core MSME growth remains a standout at ~19% YoY, aided by cash-flow-based lending and digital initiatives, with NPA in the digital MSME portfolio contained at ~1%. Retail traction remains strong with revamped CASA-backed products driving customer acquisition and cross-sell opportunities. Corporate sanctions including new proposals of INR1.35t provide a growth pipeline, though deployment will be selective given competitive pricing. Focus areas include renewable energy and data centers, which support yields without diluting credit quality. The shift towards granular, high-yielding segments enhances portfolio diversity and margin resilience, with PNB aiming to scale RAM profitably.

NIM to remain broadly stable in 2Q, while 3Q and 4Q likely to improve

PNB expects NIM to bottom out in 2QFY26, with recovery visible from 3Q onward and sharper improvement in 4Q. Global NIM stood at 2.70% in 1Q, with management guiding to sustain ~2.7% in 2Q before a sequential uptick to 2.8–2.9% in 3Q and >2.9% in 4Q. A key driver is the sharp reduction in CDs, which have fallen to ~INR400b currently from INR900b in Dec'24. This will be fully phased out over the coming year, thereby easing funding costs. Simultaneously, the rundown of low-yielding IBPCs will structurally improve blended yields, even though it temporarily suppresses reported retail growth. Management expects NIM to be ~2.8–2.9% in FY26E vs. the reported NIM of 2.93% as of FY25.

Scalable fee income growth to drive steady improvement in the C/I ratio towards ~50%

PNB's cost-to-income ratio, currently at ~55%, is expected to trend towards below 50% in the next five years, driven primarily by income acceleration rather than cost-cutting. Management emphasized that operating leverage will come through scaling fee-based streams, particularly CMS, supply chain finance, and the upcoming thrust on the credit card business. CMS has already contributed INR2b in 1QFY26, with a quarterly run-rate target of INR5b by 4QFY26, supported by mandatory CMS integration for NBFC partners. Supply chain finance, where the bank has scaled an outstanding book of INR35b, is being aggressively expanded, offering both yield and fee upside. The credit card franchise, with ~0.7m cards currently, will see a major launch in Nov'25 with differentiated products, including a metal card, aimed at improving penetration and cross-sell. Alongside steady loan growth and improved margins, these new income streams are expected to structurally lift operating income. As a result, PNB is confident of sustainably lowering the C/I ratio while maintaining the capacity to invest in growth. Sustained improvement in income levers can augment PNB's C/I ratio improvement towards 50% over the coming years.

Superior asset quality and industry-best PCR provide stability in RoA

PNB's asset quality metrics remain robust, providing a strong foundation for sustainable profitability. Management guided slippages of ~INR80b in FY26, offset by recoveries of ~INR40b, keeping net stress under control. Management has anticipated a recovery of INR 9b from one account, which has already materialized. Importantly, the bank carries one of the highest PCRs in the industry at 97% (tangible PCR: ~90%), which limits incremental provisioning needs. Credit costs are guided at just 20–30 bps, among the lowest in the system, and management does not anticipate additional buffers over the next three years. ECL implementation, slated for FY28E, is expected to have a limited impact, reflecting the inherent strength of the book. We expect the asset quality ratio to improve, with GNPA estimated to decline to 3.1% in FY26 and NNPA to 0.3%. GNPA is likely to trend further down at 2.5% and NNPA at 0.2% with best-in-class PCR at ~93% in FY28E.

Tax rate to be reduced to 25% from 2QFY26E; aiming for a 1.1%+ RoA in FY27E

Management guided an RoA of 0.9% in FY26E as PNB transitioned to a lower tax regime and took higher tax absorption in 1QFY26. In 1QFY26, its reported RoA thus stood at 0.37%, though underlying profitability was strong. During 1Q, operating profit was also weighed down by elevated opex linked to PSLC purchases (INR8.5b), which PNB is working upon and aims to minimize the PSLC drag in the coming years. With credit costs tracking below guidance (14bp vs. 0.5% guided), the earnings trajectory remains intact. Management reiterated its RoA target of 1.1-1.25% by FY27E, underpinned by portfolio mix change, asset-quality stability, and cost-rationalization efforts.

Other highlights

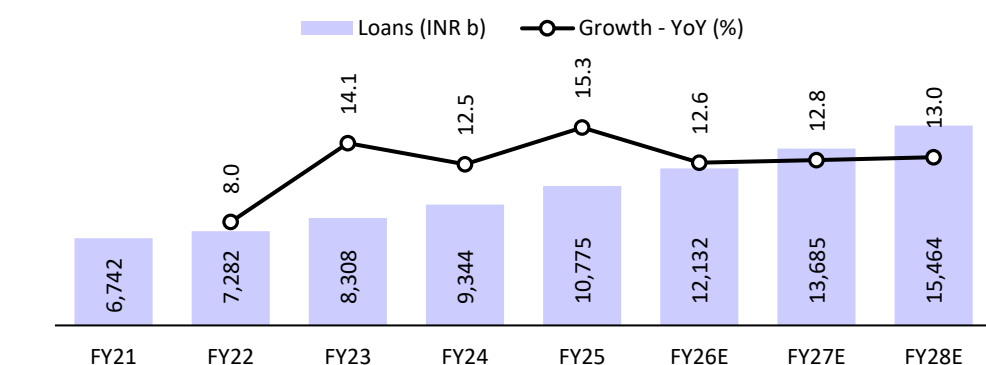
- PNB holds a 23% stake in Canara HSBC Life and plans to divest around 10% of this holding, which is expected to generate gains of INR9-10b.
- Between Sep and Dec'25, PNB will benefit from INR 150b of additional liquidity due to CRR cuts.
- PNB has only a minimal exposure of INR 8.8b to the SMEs exposed to the US market/tariffs.

Valuation and view: Reiterate BUY with a TP of INR130

- PNB has transitioned from a legacy-stressed balance sheet to a fundamentally stronger franchise, with asset-quality concerns decisively addressed. The steady reduction in GNPA (3.78%) and NNPA (0.38%), coupled with robust PCR (90.3%), underpins earnings predictability. With credit costs at just 14bp and RAM expansion driving yields, the medium-term RoA trajectory towards >1% by FY27 appears credible.
- The bank's near-term profitability is weighed down by elevated opex and one-offs, but structural earnings drivers remain intact. At current valuations, PNB trades at a discount to both private peers and select PSBs, offering a margin of safety.
- Re-rating catalysts include consistent delivery on double-digit loan growth, progress on reducing cost ratios, and sustained asset-quality leadership. We retain our constructive stance and currently estimate PNB to deliver a consistent RoA of 1% in FY27/28. We **reiterate our BUY rating** with a TP of INR130 (premised on 1.0x FY27E BV).

STORY IN CHARTS

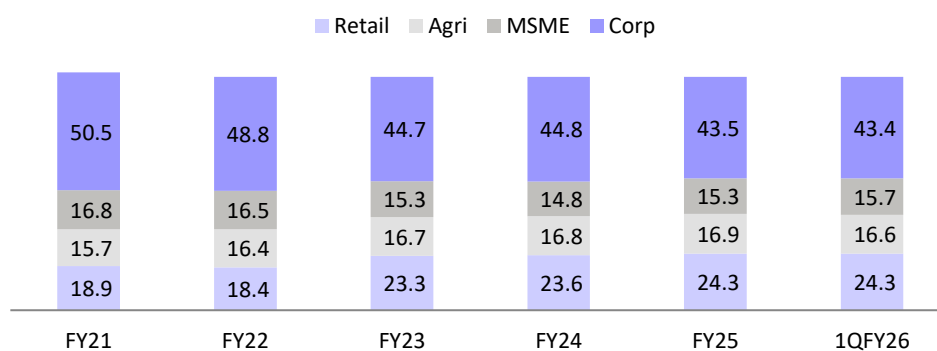
Exhibit 1: Estimate a healthy ~13% loan CAGR over FY25-28



Source: MOFSL, Company

Exhibit 2: Share of loan mix over the years

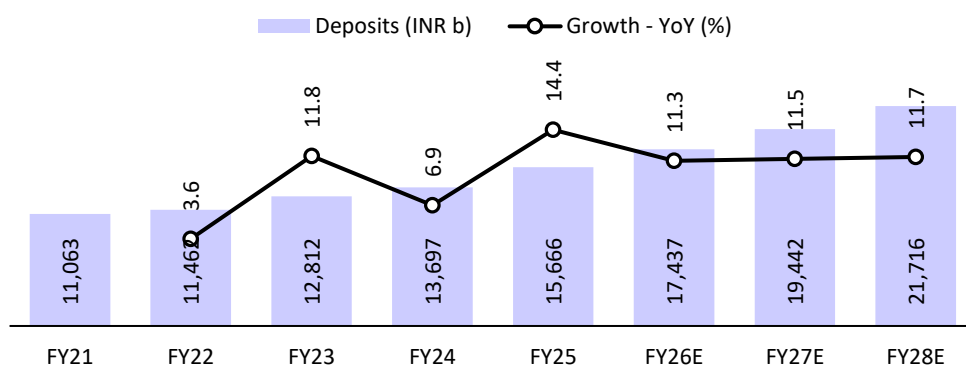
Corporate mix has declined to 43% from 51% in FY21, while the share of RAM mix has increased



Source: MOFSL, Company

Exhibit 3: Deposit CAGR to remain steady at ~11.5%

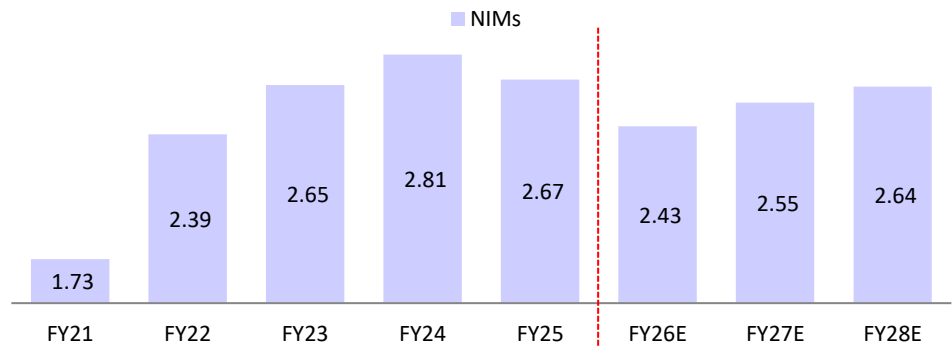
Estimate deposits to clock ~11.5% CAGR over FY25-28



Source: MOFSL, Company

Exhibit 4: NIM to bottom out in FY26E; recover thereafter by ~20bp over FY26-28E

NIM is likely to remain stable in 2QFY26 and improve thereafter

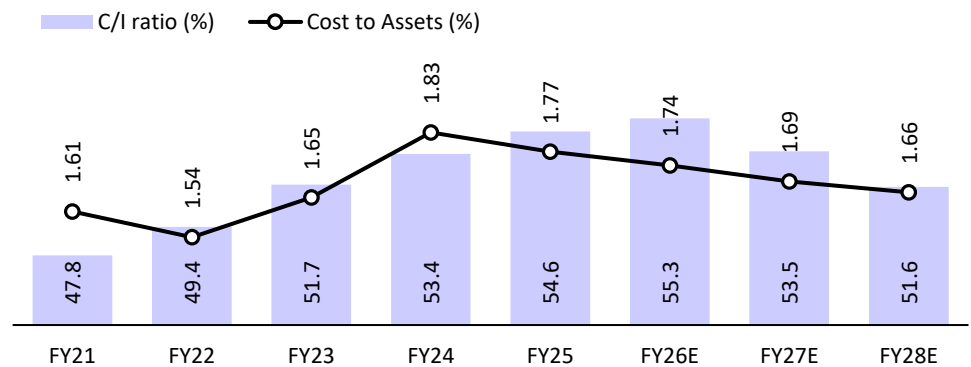


FY26,27 are on a calculated basis

Source: MOFSL, Company

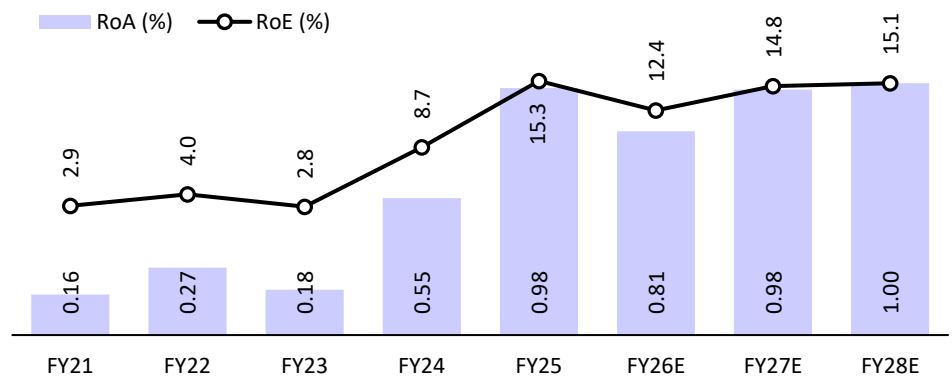
Exhibit 5: Estimate C/I ratio to moderate to 51.6% by FY28

With continued investment in business, technology, and employees, we expect the C/I ratio to decline at a calibrated pace to 51.6% by FY28



Source: MOFSL, Company

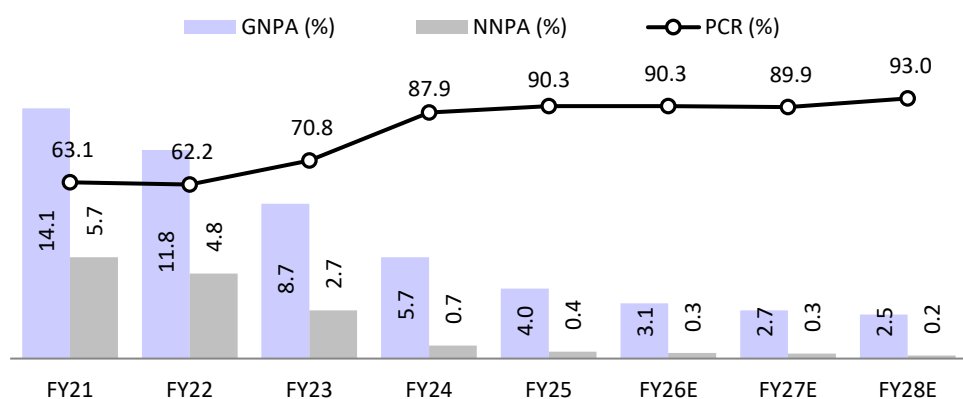
Exhibit 6: Estimate RoA to improve to ~1% in FY27 with possible upside risk



Source: MOFSL, Company

Exhibit 7: Estimate GNPA/NNPA ratios at 2.5%/0.2% by FY28

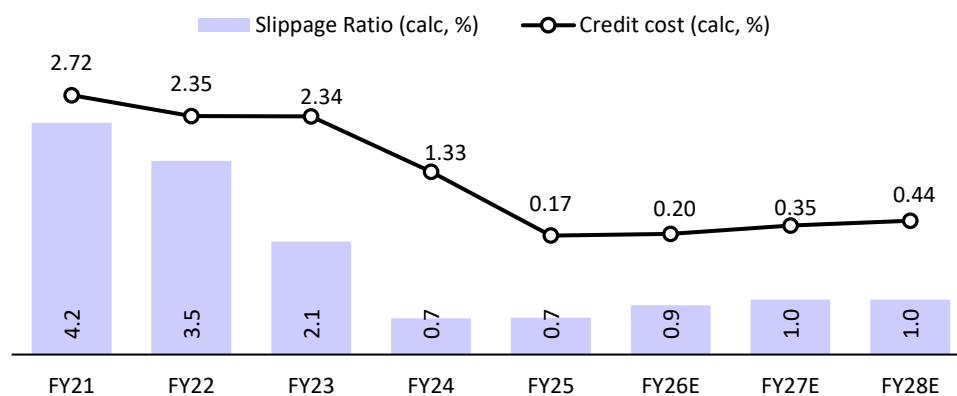
Asset quality ratios saw a continuous improvement over the years, and the GNPA ratio is estimated to further dip to 2.5% over the next few years



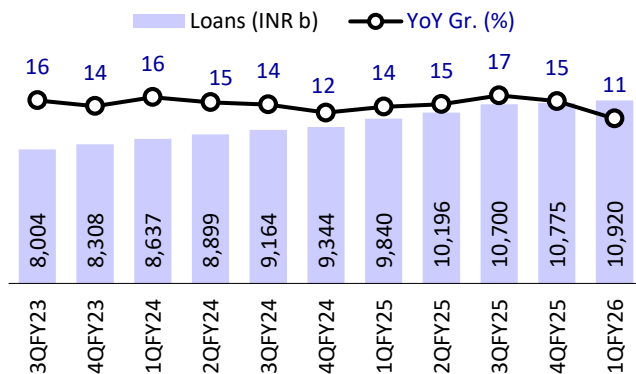
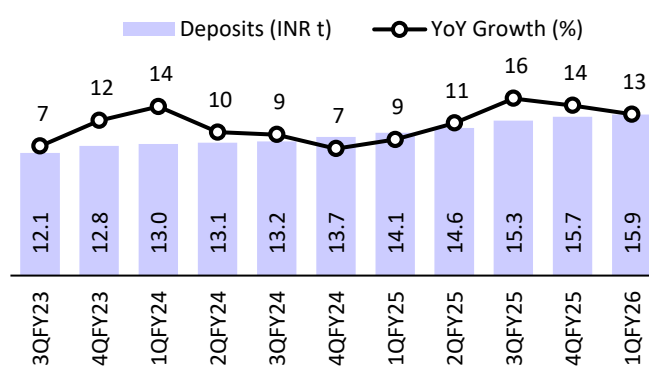
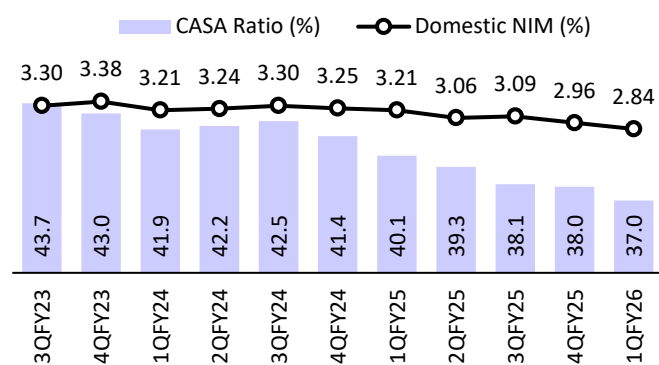
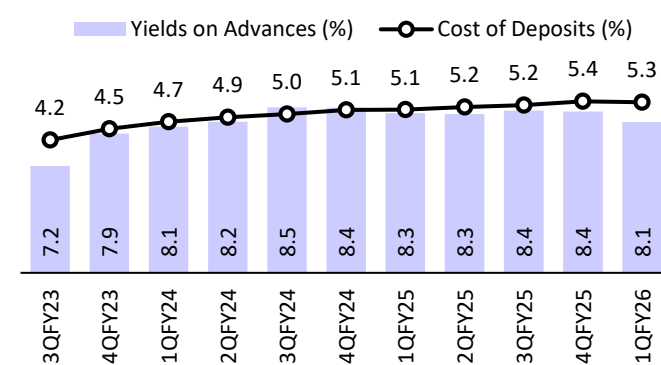
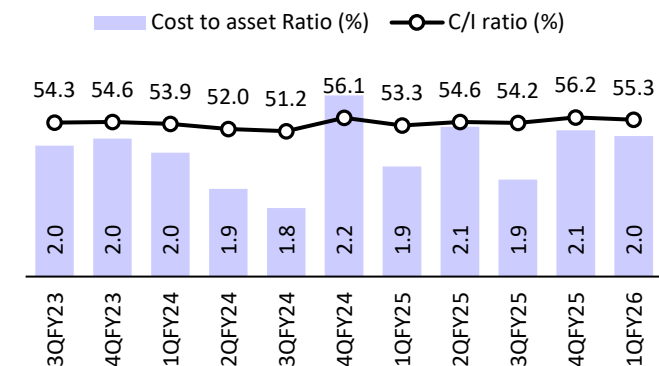
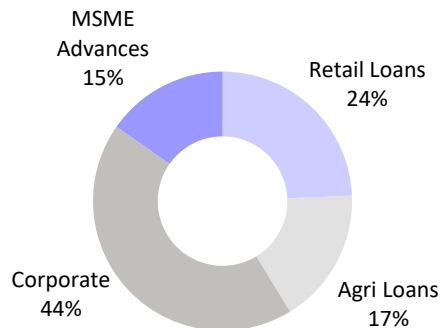
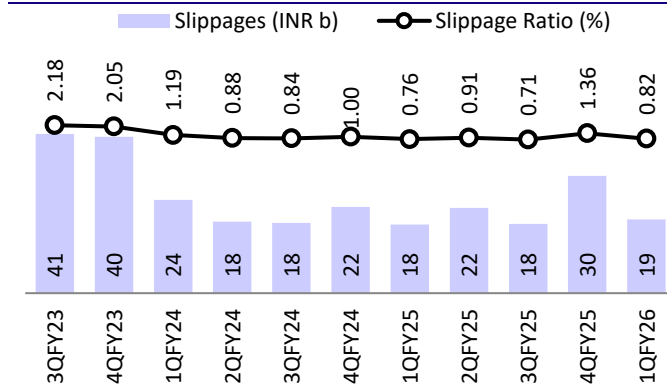
Source: MOFSL, Company

Exhibit 8: Estimate credit costs to remain in a narrow band of 20-45bp over FY25-28

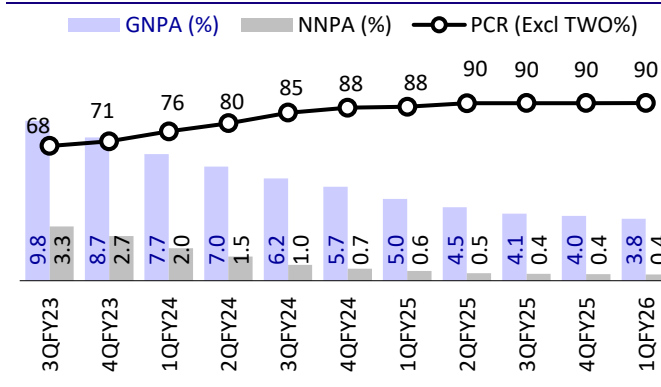
We estimate credit costs to remain stable at 20-45bp over FY25-28



Source: MOFSL, Company

Exhibit 9: Loan book grew 11% YoY (1.3% QoQ) to INR10.9t

Exhibit 10: Deposits grew 12.9% YoY (up 1.5% QoQ)

Exhibit 11: Domestic NIM moderated 12bp QoQ to 2.84%

Exhibit 12: Yields declined 22bp QoQ; CoD declined 3bp QoQ

Exhibit 13: C/I ratio moderated to 55.3% in 1QFY26

Exhibit 14: O/s loan mix: RAM constituted 57% of total loans

Exhibit 15: Slippages ratio moderated to 0.82% in 1QFY26


Source: MOFSL, Company

Exhibit 16: GNPA/NNPA ratios improved 17bp/2bp QoQ


Source: MOFSL, Company

Exhibit 17: DuPont analysis

Annual DuPont	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Interest Income	5.81	6.13	7.07	7.20	6.92	6.84	6.80
Interest Expense	3.59	3.65	4.42	4.67	4.62	4.43	4.31
Net Interest Income	2.23	2.48	2.65	2.53	2.30	2.42	2.49
Other Income	0.96	0.87	0.89	0.97	1.00	0.92	0.91
Total Income	3.19	3.36	3.54	3.50	3.29	3.33	3.40
Operating Expenses	1.57	1.74	1.89	1.91	1.82	1.78	1.75
Employees	0.92	1.07	1.22	1.26	1.21	1.19	1.16
Others	0.65	0.67	0.66	0.65	0.62	0.60	0.59
Operating Profits	1.61	1.62	1.65	1.59	1.47	1.55	1.65
Core operating Profits	1.38	1.70	1.60	1.36	1.42	1.49	1.59
Provisions	1.28	1.31	0.78	0.10	0.14	0.24	0.30
PBT	0.34	0.31	0.87	1.49	1.33	1.31	1.35
Tax	0.07	0.13	0.33	0.50	0.52	0.33	0.34
RoA	0.27	0.18	0.55	0.98	0.81	0.98	1.00
Leverage (x)	14.96	15.44	15.95	15.56	15.24	15.14	15.03
RoE	4.02	2.79	8.70	15.31	12.39	14.81	15.09

Exhibit 18: One-year forward P/B ratio

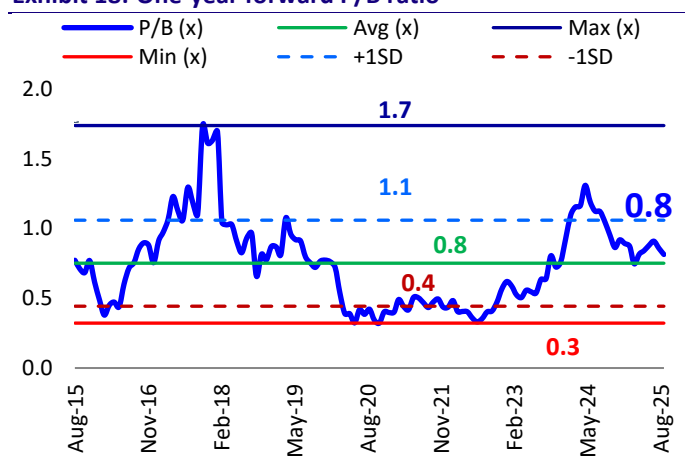
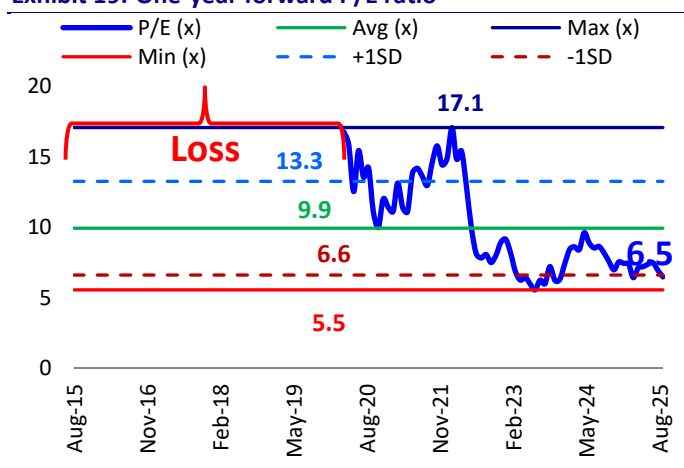


Exhibit 19: One-year forward P/E ratio



Financials and valuations

Income Statement

(INR b)

Y/E March	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Interest Income	748.8	851.4	1,069.0	1,217.6	1,322.6	1,449.8	1,605.9
Interest Expense	461.9	506.5	668.2	789.8	883.5	938.1	1,017.3
Net Interest Income	286.9	344.9	400.8	427.8	439.1	511.7	588.6
- Growth (%)	-6.1	20.2	16.2	6.7	2.6	16.5	15.0
Non-Interest Income	123.2	121.4	133.8	163.1	190.8	194.6	214.1
Total Income	410.1	466.3	534.7	590.9	629.9	706.3	802.7
- Growth (%)	-3.4	13.7	14.7	10.5	6.6	12.1	13.6
Operating Expenses	202.5	241.1	285.4	322.6	348.4	377.9	413.9
Pre Provision Profits	207.6	225.3	249.3	268.3	281.5	328.4	388.8
- Growth (%)	-6.3	8.5	10.7	7.6	4.9	16.6	18.4
Core PPop	178.3	236.7	242.4	229.1	271.7	316.6	374.6
- Growth (%)	-4.3	32.8	2.4	-5.5	18.6	16.5	18.3
Provisions (excl tax)	164.5	182.4	117.4	16.7	26.9	50.7	71.3
PBT	43.2	42.9	131.9	251.6	254.7	277.7	317.5
Tax	8.6	17.8	49.5	85.3	99.3	70.5	80.6
Tax Rate (%)	19.9	41.5	37.5	33.9	39.0	25.4	25.4
PAT	34.6	25.1	82.4	166.3	155.3	207.2	236.9
- Growth (%)	71.0	-27.5	228.8	101.7	-6.6	33.4	14.3

Balance Sheet

Y/E March	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Share Capital	22	22	22	23	23	23	23
Equity Share Capital	22.0	22.0	22.0	23.0	23.0	23.0	23.0
Reserves & Surplus	932.8	976.5	1,042.7	1,250.6	1,377.6	1,540.3	1,719.3
Net Worth	954.9	998.6	1,064.8	1,273.6	1,400.6	1,563.3	1,742.3
Deposits	11,462.2	12,811.6	13,697.1	15,666.2	17,436.5	19,441.7	21,716.4
- Growth (%)	3.6	11.8	6.9	14.4	11.3	11.5	11.7
of which CASA Dep	5,336.5	5,380.2	5,525.0	5,735.4	6,346.9	7,387.9	8,643.1
- Growth (%)	8.3	0.8	2.7	3.8	10.7	16.4	17.0
Borrowings	456.8	512.9	504.3	837.8	751.2	778.8	809.0
Other Liabilities & Prov.	274.2	295.2	352.2	404.1	464.7	534.4	614.6
Total Liabilities	13,148.1	14,618.3	15,618.4	18,181.7	20,053.0	22,318.2	24,882.3
Current Assets	1,326.5	1,551.1	1,291.0	1,487.2	1,455.0	1,617.6	1,802.0
Investments	3,721.7	3,960.0	4,203.2	4,973.1	5,420.7	5,854.3	6,322.7
- Growth (%)	-5.3	6.4	6.1	18.3	9.0	8.0	8.0
Loans	7,281.9	8,308.3	9,344.3	10,774.7	12,132.4	13,685.3	15,464.4
- Growth (%)	8.0	14.1	12.5	15.3	12.6	12.8	13.0
Fixed Assets	106.7	120.5	123.2	130.5	138.4	146.7	155.5
Other Assets	711.3	678.4	656.6	816.1	906.5	1,014.3	1,137.7
Total Assets	13,148.1	14,618.3	15,618.4	18,181.7	20,053.0	22,318.2	24,882.3

Asset Quality	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
GNPA	924.5	773.3	563.4	440.8	389.6	382.3	394.3
NNPA	349.1	225.9	68.0	42.9	37.7	38.6	27.5
Slippages	247.4	160.3	58.3	67.6	103.1	129.1	145.7
GNPA Ratio	11.8	8.7	5.7	4.0	3.1	2.7	2.5
NNPA Ratio	4.8	2.7	0.7	0.4	0.3	0.3	0.2
Slippage Ratio	3.5	2.1	0.7	0.7	0.9	1.0	1.0
Credit Cost	2.35	2.34	1.33	0.17	0.20	0.35	0.44
PCR (Excl Tech. write off)	62.2	70.8	87.9	90.3	90.3	89.9	93.0

E: MOFSL Estimates

Financials and valuations

Ratios

Y/E March	FY22	FY23	FY24	FY25	FY26E	FY27E	FY28E
Yield and Cost Ratios (%)							
Avg. Yield- on Earning Assets	6.2	6.5	7.5	7.6	7.3	7.2	7.2
Avg. Yield on loans	6.9	7.4	8.6	8.6	8.3	8.1	8.1
Avg. Yield on Investments	6.3	6.7	6.9	6.8	6.8	6.7	6.6
Avg. Cost of Int. Bear. Liab.	3.9	4.0	4.9	5.1	5.1	4.9	4.8
Avg. Cost of Deposits	3.8	3.9	4.7	5.0	4.9	4.7	4.6
Interest Spread	2.3	2.5	2.6	2.4	2.2	2.3	2.4
Net Interest Margin	2.4	2.6	2.8	2.7	2.4	2.6	2.6

Capitalisation Ratios (%)

CAR	14.5	15.5	16.0	17.1	16.0	14.7	13.6
Tier I	11.7	12.7	13.2	14.1	13.0	12.1	11.2
CET-1	10.6	11.2	11.1	12.4	10.8	10.1	9.3
Tier II	2.8	2.8	2.8	3.0	3.0	2.6	2.4

Business Ratios (%)

Loans/Deposit Ratio	63.5	64.8	68.2	68.8	69.6	70.4	71.2
CASA Ratio	46.6	42.0	40.3	36.6	36.4	38.0	39.8
Cost/Assets	1.5	1.6	1.8	1.8	1.7	1.7	1.7
Cost/Total Income	49.4	51.7	53.4	54.6	55.3	53.5	51.6
Cost/Core income	53.2	2.0	-4.5	-0.8	-3.8	-3.4	-3.1
Int. Expense/Int. Income	61.7	59.5	62.5	64.9	66.8	64.7	63.3
Fee Income/Total Income	22.9	28.5	23.7	21.0	28.7	25.9	24.9
Non Int. Inc./Total Income	30.0	26.0	25.0	27.6	30.3	27.6	26.7
Empl. Cost/Total Expense	58.5	61.4	64.8	66.2	66.2	66.5	66.2

Efficiency Ratios (INRm)

Employee per branch (in nos)	10.2	10.3	10.1	10.1	10.1	10.1	10.1
Staff cost per employee	1.1	1.4	1.8	2.1	2.2	2.3	2.5
CASA per branch	528.5	534.0	545.1	562.9	602.4	687.5	788.5
Deposits per branch	1,135.1	1,271.5	1,351.3	1,537.6	1,655.0	1,809.2	1,981.2
Business per Employee	181.7	202.8	225.1	257.3	277.8	305.1	335.7
Profit per Employee	0.3	0.2	0.8	1.6	1.5	1.9	2.1

Valuation ratios

RoE	4.0	2.8	8.7	15.3	12.4	14.8	15.1
RoA	0.3	0.2	0.5	1.0	0.8	1.0	1.0
RoRWA	0.6	0.4	1.2	2.1	1.7	2.1	2.1
Book Value (INR)	83	86	93	107	118	132	148
- Growth (%)	0.2	3.9	7.0	15.4	10.3	12.0	11.8
Price-BV (x)	1.3	1.3	1.2	1.0	1.0	0.8	0.8
Adjusted BV (INR)	58	68	84	101	112	126	142
Price-ABV (x)	1.9	1.6	1.3	1.1	1.0	0.9	0.8
EPS (INR)	3.2	2.3	7.5	14.8	13.5	18.0	20.6
Price-Earnings (x)	34.8	49.2	15.0	7.6	8.3	6.2	5.4
Dividend Per Share (INR)	0.6	0.7	1.5	2.9	3.0	3.9	5.1
Dividend Yield (%)	0.6	0.6	1.4	2.7	2.8	3.6	4.7

E: MOFSL Estimates

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

NOTES

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

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

Disclosures

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

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412 and BSE enlistment no. 5028. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL 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 and is a member of Association of Portfolio Managers in India (APMI) for distribution of PMS products. Details of associate entities of Motilal Oswal Financial Services Ltd. are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/Associate%20Details.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://qalaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

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

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

For Singapore

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

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

Nainesh Rajani

Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

Specific Disclosures

- Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies). MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes.
Nature of Financial interest is holding equity shares or derivatives of the subject company
- Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
- Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- Research Analyst has not served as an officer, director or employee of subject company(ies).
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
- 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) in the past 12 months.
- MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
- 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, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

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

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

Registration granted by SEBI, enlistment as RA with Exchange and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors

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

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

Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com
Mr. Neeraj Agarwal	022 40548085	na@motilaloswal.com
Mr. Siddhartha Khemka	022 50362452	po.research@motilaloswal.com

Registration details of group entities: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412, BSE enlistment no. 5028 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579, APMI: APRN00233. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

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