Financials

WATDR inches up slightly; NIMs to see negative bias

CD ratio declines to 79% as credit growth moderates

- **The weighted average lending rate (WALR) on fresh loans declined 4bp MoM in Sep'24, compared with a 1bp increase in Aug'24. PSBs reported a 3bp decline MoM (up 5bp MoM in Aug'24), while PVBs saw a 14bp MoM gain after a sharp fall of 15bp in Aug'24.**
- **The weighted average term deposit rate (WATDR) for the system increased 2bp MoM to 6.95% (up 2bp MoM for both PSBs and PVBs). During Jul-Sep'24, WADTDR rose 4bp (7bp for PSBs and 4bp for PVBs); this indicates that competition remains intense for PVBs and PSBs.**
- **Credit growth for the system decelerated sharply to 11.5% as on 18th Oct'24. We note that the deceleration in credit growth was sharper than we thought, led by weakness in the credit environment (led by unsecured loan), besides elevated LDR. We see downside risk to our FY25 credit growth estimate of 12.5% and believe that it can drift down toward ~10.5% YoY.**
- **With repo rates remaining unchanged since Feb'23, lending rates have increased at a slower pace, while funding costs have been rising amid ongoing liability re-pricing and the rise in deposit rates by select banks.**
- **We, thus, expect a minor negative bias in margins of the banking system in the near term, while the potential turn in the rate cycle during 2HFY25 may further compress lending yields. Our top picks are ICICI, HDFCB, SBIN, FB and AUBANK.**

WALR on fresh loan declines in Sep'24; down 3bp MoM for PSBs

- WALR on fresh loans declined 4bp MoM (up 1bp in Aug'24), with a 3bp fall for PSBs and a 14bp gain for PVBs (after a sharp fall of 15bp in Aug'24). During Jul-Sep'24, WALR rose 5bp, with major contribution from PSBs (11bp) and a small 2bp contribution from PVBs. As of Sep'24, fresh rupee loans over repo premium stood at 3.83% for PVBs (3.69% in Aug and 3.84% in Jul) and 2.07% for PSBs (2.1% in Aug and 2.05% in Jul). Banks remain competitive as most of them look for healthy growth while maintaining margins.
- **WALR on outstanding loans was flat MoM** at 9.88%. It was flat for both PSBs and PVBs in Sep'24, Aug'24 and Jul'24. During Jul-Sep'24, WALR on O/S loan was flat for SCBs at 9.88% (up 1bp MoM).
- One-year MCLR for most PVBs increased 15-90bp YoY, with City Union recording a maximum increase of 90bp. For DCB, it remained flat at 2bp YoY. Meanwhile, PSBs saw a 25-40bp expansion in MCLR.

WATDR rises 2bp MoM for both PSBs and PVBs

- WATDR rose 2bp MoM in Sep'24, led by a 2bp gain for both PSBs and PVBs. During Jul-Sep'24, WADTDR rose 4bp, with a 7bp gain for PSBs and 4bp for PVBs; this indicates that competition remains intense among PVBs and PSBs.
- With systemic liquidity in deficit and strong competition for deposits, we anticipate TD rates will stay high in the near term, even with the expected rate cuts. However, banks will continue to prioritize a balanced mix of LCR, CASA, and retail deposits.

	SCB's		
Month	WALR – O/s Loans	WALR - Fresh Loans	WATDR
Sep-23	9.81	9.38	6.70
Oct-23	9.82	9.50	6.76
Nov-23	9.81	9.41	6.79
Dec-23	9.81	9.32	6.83
Jan-24	9.83	9.43	6.85
Feb-24	9.81	9.36	6.86
Mar-24	9.83	9.37	6.88
Apr-24	9.81	9.55	6.91
May-24	9.86	9.45	6.92
Jun-24	9.89	9.32	6.91
Jul-24	9.89	9.40	6.92
Aug-24	9.89	9.41	6.93
Sep-24	9.88	9.37	6.95

	PSB Banks		
Month	WALR – O/s Loans	WALR - Fresh Loans	WATDR
Sep-23	9.21	8.63	6.75
Oct-23	9.25	8.67	6.80
Nov-23	9.25	8.60	6.85
Dec-23	9.25	8.51	6.88
Jan-24	9.25	8.63	6.91
Feb-24	9.25	8.66	6.94
Mar-24	9.24	8.68	6.96
Apr-24	9.22	8.85	6.97
May-24	9.21	8.60	6.99
Jun-24	9.21	8.46	7.00
Jul-24	9.20	8.55	7.03
Aug-24	9.20	8.60	7.05
Sep-24	9.21	8.57	7.07

	Private Banks		
Month	WALR - O/s Loans	WALR - Fresh Loans	WATDR
Aug-23	10.64	10.16	6.67
Sep-23	10.62	10.18	6.69
Oct-23	10.59	10.20	6.75
Nov-23	10.59	10.23	6.76
Dec-23	10.59	10.20	6.83
Jan-24	10.63	10.23	6.82
Feb-24	10.61	10.08	6.82
Mar-24	10.64	10.29	6.83
Apr-24	10.63	10.13	6.88
May-24	10.63	10.13	6.90
Jun-24	10.83	10.31	6.83
Jul-24	10.84	10.34	6.85
Aug-24	10.84	10.19	6.85
Sep-24	10.83	10.33	6.87

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

Research Analyst: Dixit Sankharva (Dixit.sankharva@motilaloswal.com) | **Disha Singhal** (Disha Singhal@MotilalOswal.com)

Deposit growth surpasses credit growth; PVBs' CD ratio down 347bp since Jan'24

- Systemic credit growth has decelerated sharply to 11.5% as of 18th Oct'24. After two long years of healthy credit growth, banks have now slowed their credit growth in order to adjust their high CD ratio.
- Deposit growth has been following a steady trajectory at 11.7% vs. 11.8% in the previous fortnight, indicating healthy traction in liabilities for the banking system.
- As a result, the gap between credit and deposits reduced to -0.2% from the highs of 7% as of May'24. Banks have increased deposit mobilization efforts over the past few months by raising short-term TD rates to match ALM requirements, while some banks have decided to either opt for bulk TDs or redirect their focus on certificate of deposits (CDs).
- **We note that the deceleration in credit growth was sharper than we thought, partly driven by the weakness in the credit environment (mainly unsecured loans), besides elevated LDR. We revise our FY25 credit growth estimate to 11% YoY vs. 12.5% YoY earlier.**

CD ratio moderates; incremental CD ratio eases to 77.7% (lowest in past 30 months)

- Outstanding LDR has moderated to 79% from the highs of 80.3% in Mar'24. This decline looks minor; however, considering the rising LDR at most of the PSU banks, it implies a faster restoration of skewed CD ratio of private banks. The incremental CD ratio for the sector eased to 77.7%.
- Incremental LDR for banks under our coverage stood at 50-120%, with the lowest for HDFCB at 50% and the highest for INBK at 119%. It was 108% for BOB. The LCR ratio, however, remained at a comfortable level, with most large PVBs falling in the range of 112-136%.

Margin compression to continue, albeit at a slower pace

- With repo rates remaining unchanged since Feb'23, lending rates have increased at a slow pace; however, funding costs have gradually increased due to continuous liability re-pricing and hikes in term deposit rates by select banks. Add to this, most of the banks have been slowing down their credit growth amid rising stress in unsecured loans, which may lead to NIM compression.
- Amid the tight interest rate environment and liquidity conditions, we expect NIMs to continue to see a slight contraction, although at a slower pace.

Our View: Maintain preference for ICICIBC, HDFCB, SBI, FB, and AUBANK

- We keenly monitor the FY25 margin trajectory, as a potential turn in the interest rate cycle would adversely impact lending yields. Banks with a higher proportion of fixed loan books are expected to fare better and report NIM expansion or at least stable NIMs in FY26.
- We remain vigilant about margins and the delinquency cycle in unsecured loans, and expect the credit cost to inch up for select banks.
- With most of the 2QFY25 earnings now behind (barring SBIN and Equitas), we have further cut by ~1% our aggregate earnings estimates for PVBs, led by IIB, IDFCB and RBK. We expect the aggregate earnings to grow at 8% YoY. Looking

forward, we anticipate a pick-up in earnings momentum, projecting PAT growth of 16% in FY26 and 18% in FY27.

- For PSBs, despite a solid 2QFY25 performance, we have marginally raised FY25 earnings estimates by 0.5% (pending SBIN's earnings). We estimate aggregate earnings growth for PSBs to moderate to 11-13% over FY26-27.
- **Our top picks are: ICICI, HDFCB, SBI, FB, and AUBANK.**

Exhibit 1: WALR on outstanding loans: flat for both PVBs and PSBs

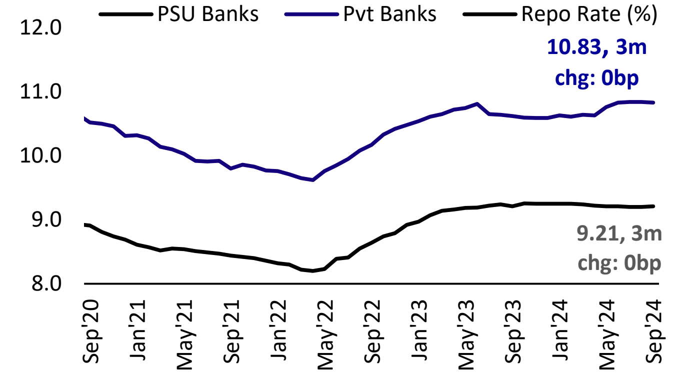


Exhibit 2: WALR on fresh loans: up in Oct'24 for PVBs and down marginally for PSBs

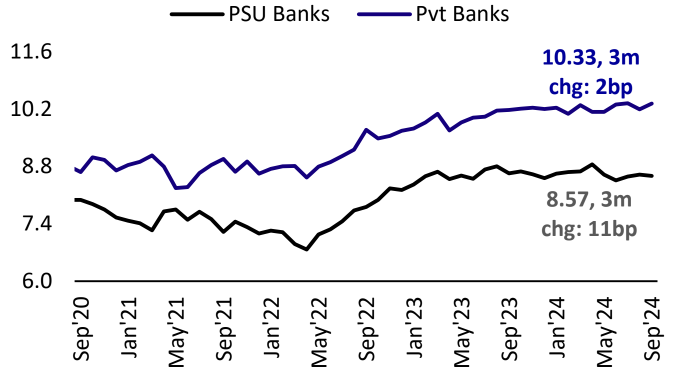
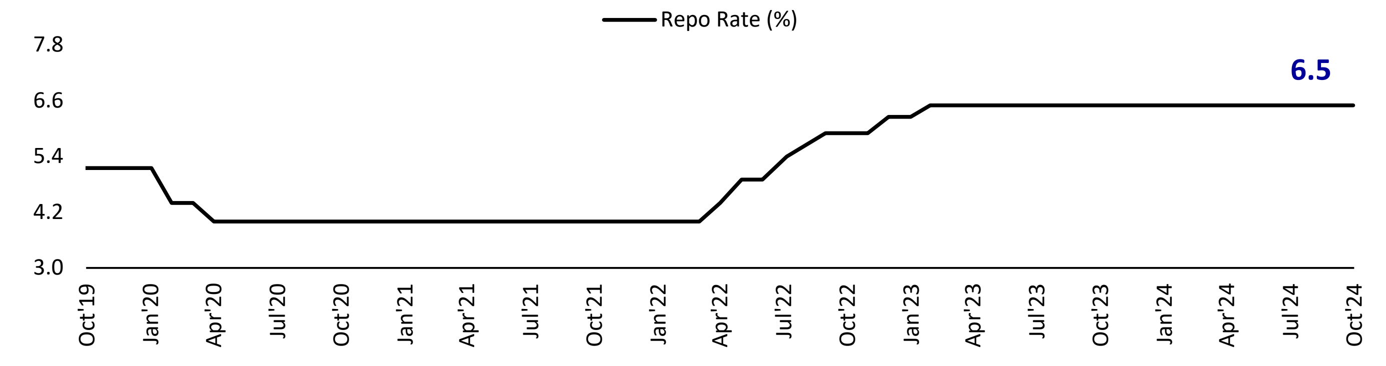


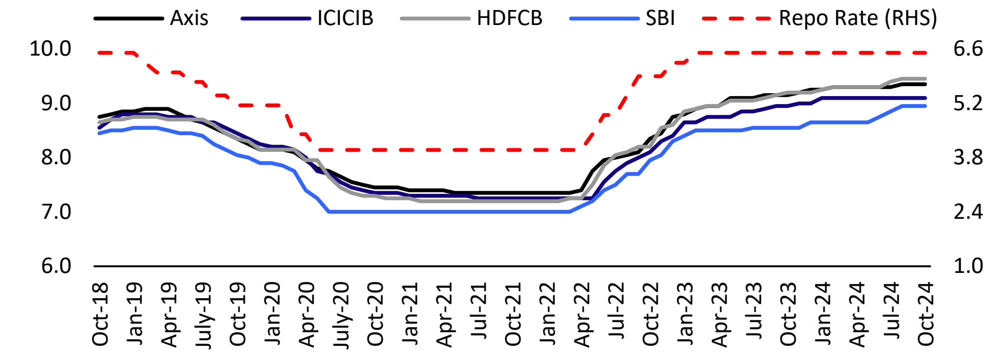
Exhibit 3: Repo rate remains unchanged at 6.5% since Feb'23



Source: RBI, MOFSL

HDFCB has seen the sharpest rise (220bp) in MCLR from Apr'22 to Oct'24.

Exhibit 4: MCLR for large banks rose 185-220bp from Apr'22 to Oct'24, while repo rate increased 250bp during the same period



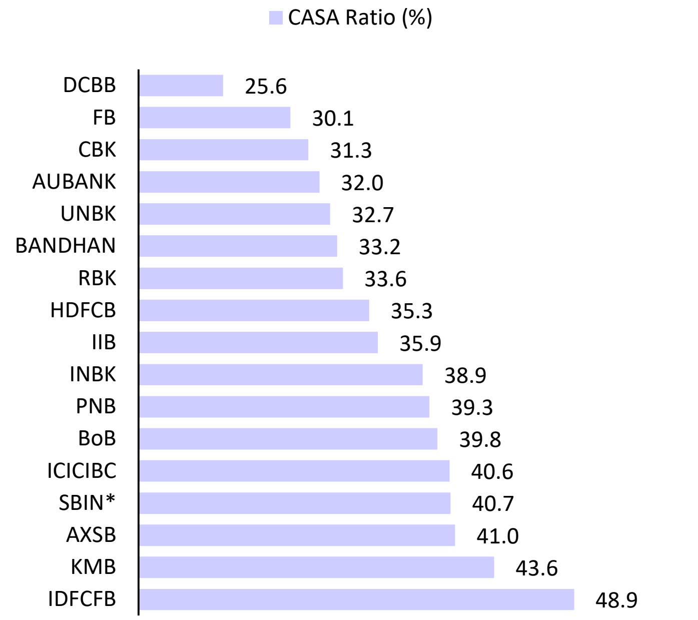
Source: RBI, MOFSL

Exhibit 5: One-year MCLR rate rose 20-30bp YoY for PVBs and 25-40bp for PSBs

	2022				2023				2024				YoY Change
	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	(in %)
Kotak	7.25	7.40	8.05	8.45	8.95	9.10	9.25	9.35	9.45	9.45	9.50	9.55	0.20
IIB	8.45	8.55	9.10	9.55	9.95	10.20	10.25	10.30	10.35	10.40	10.45	10.55	0.25
RBL	8.35	8.60	9.15	9.70	9.95	10.20	10.10	10.20	10.30	10.37	10.30	10.50	0.30
Federal	8.10	8.00	8.30	8.70	9.20	9.30	9.45	9.50	9.70	10.55	9.70	9.80	0.30
BOB	7.30	7.35	7.65	7.95	8.50	8.60	8.65	8.70	8.80	9.70	8.90	8.95	0.25
CBK	7.25	7.25	7.50	7.90	8.35	8.65	8.65	8.70	8.80	8.85	8.95	9.05	0.35
INBK	7.30	7.30	7.55	7.85	8.30	8.60	8.65	8.70	8.80	8.90	8.95	9.00	0.30
PNB	7.25	7.25	7.55	7.75	8.30	8.50	8.60	8.65	8.70	8.85	8.85	8.95	0.30
UNBK	7.25	7.25	7.55	7.90	8.40	8.65	8.65	8.70	8.80	8.80	8.90	9.00	0.30
SBI	7.00	7.10	7.50	7.95	8.40	8.50	8.55	8.55	8.65	8.90	8.85	8.95	0.40

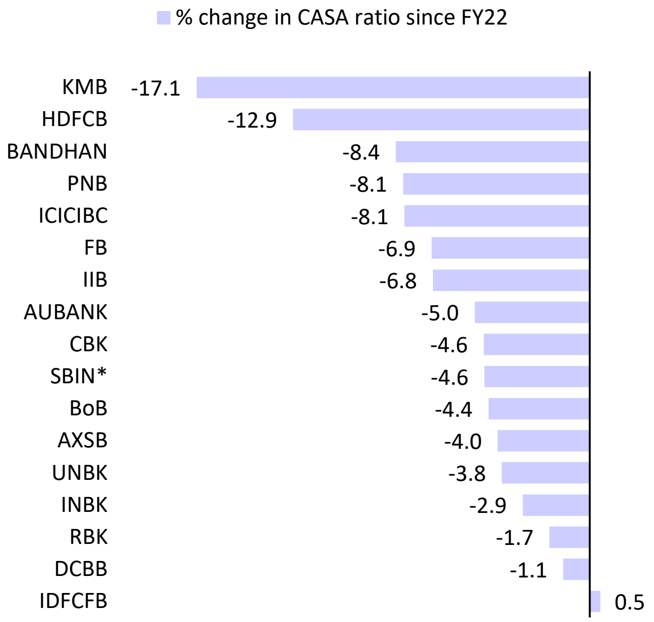
Source: RBI, MOFSL

Exhibit 6: CASA ratio continues to moderate for most banks



*SBI data as on 1QFY25, Source: MOFSL, Company

Exhibit 7: Decline in CASA ratio for banks since FY22



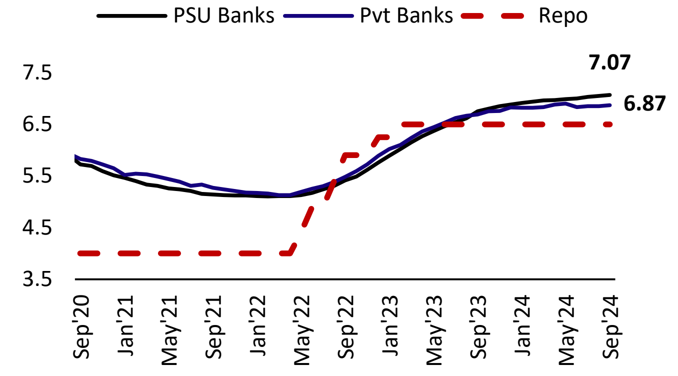
Note: Decline in HDFCB is attributed partly to the merger;
*SBI data as on 1QFY25, Source: MOFSL, Company

Exhibit 8: PSBs had a sizeable mix of MCLR-linked loans as of 2QFY25 (%)

<table>
<tr><th>Loans Mix (%) - 2QFY25</th><th>MCLR</th><th>EBLR</th><th>Repo Linked</th><th>Others (Fixed, base rate, foreign currency-floating)</th></tr>
<tr><td>AXSB</td><td>11</td><td>4</td><td>53</td><td>32</td></tr>
<tr><td>ICICIBC</td><td>16</td><td>1</td><td>51</td><td>32</td></tr>
<tr><td>RBL*</td><td>7</td><td>35</td><td colspan="2">58</td></tr>
<tr><td>FB</td><td>10</td><td colspan="2">50</td><td>60</td></tr>
<tr><td>CBK</td><td>48</td><td>41</td><td></td><td>11</td></tr>
<tr><td>INBK</td><td>58</td><td></td><td>36</td><td>6</td></tr>
<tr><td>PNB</td><td>34</td><td>10</td><td>42</td><td>17</td></tr>
<tr><td>SBIN*</td><td>36</td><td>27</td><td></td><td>37</td></tr>
</table>

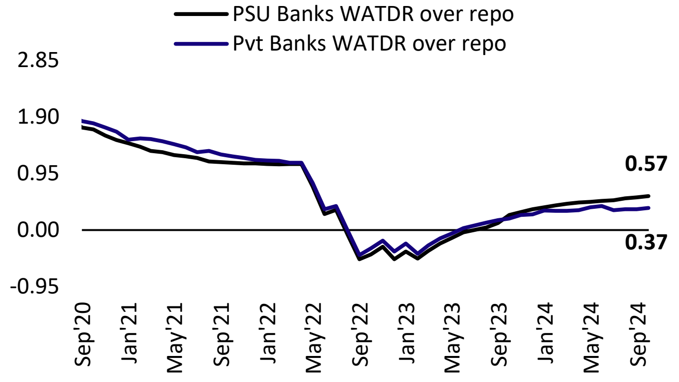
* data as on 1QFY25, Source: MOFSL, Company

Exhibit 9: WATDR stood at 7.07% for PSBs and 6.87% for PVBs



Source: MOFSL, RBI

Exhibit 10: WATDR was higher for both PVBs/PSBs at 57bp/37bp vs. the repo rate



Source: MOFSL, RBI

AU, IDFCB, RBK, Bandhan, DCB, and IIB offer much higher interest rates in certain buckets than other larger banks.

Exhibit 11: SA rates offered by various banks

(%)	SA Rate
AXSB	3.0%/3.5% (>INR5m)
HDFCB	3.0%/3.5% (>INR5m)
ICICIBC	3.0%/3.5% (>INR5m)
KMB	3.5%/4.0% (>INR5m)
IIB	3.5% to 6.75% (max rate for deposits between INR1m and above)
RBK	3.50% to 7.75% (max rate for deposits between INR0.75b to 1.25b)
IDFCFB	3% to 7.25% (max rate for deposits between INR0.5m-500m)
BANDHAN	3.0% to 8.0% (max rate for deposits above INR0.5b)
AUBANK	3.0% to 7.25% (max rate for deposits between INR10m to 50m)
BOB	2.75%/4.5% (max rate for deposits for INR10b and above)
PNB	2.7%/3.0% (max rate for deposits for INR1b and above)
SBIN	2.7%/3% (>INR100m)
DCBB	1.75% to 8.0% (max rate for deposits between INR10m to 20m)

Source: MOFSL, Company

Top four PVBs offer lower FD rates vs. other players.

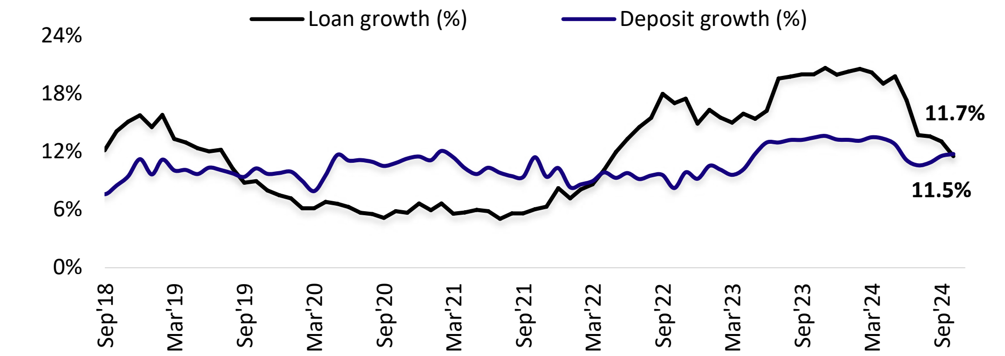
Exhibit 12: Peak term deposit rates across different buckets for major banks

(%)	7-14 days	0-3 months	3-9 months	9-15 months	15-36 months
Large pvt banks					
HDFCB	3.00	4.50	5.75	6.60	7.35
AXSB	3.00	4.50	5.75	6.70	7.25
ICICIBC	3.00	4.50	5.75	6.70	7.25
KMB	2.75	3.50	7.00	7.40	7.40
IIB	3.50	4.75	6.10	7.75	7.25
Mid-size pvt banks					
RBK	3.50	4.50	6.05	7.50	8.10
IDFCFB	3.00	4.50	5.75	7.75	7.25
BANDHAN	3.00	4.50	4.50	8.05	7.25
Federal	3.00	5.50	6.25	7.35	7.40
Small Finance Banks					
AUBANK	3.75	5.50	7.25	7.85	8.00
EQUITASB	3.50	4.50	6.75	8.25	8.15
JANASFB	3.00	5.00	7.75	8.25	8.25
UJJIVAN	3.75	4.25	7.50	8.25	8.00

Source: MOFSL, Company

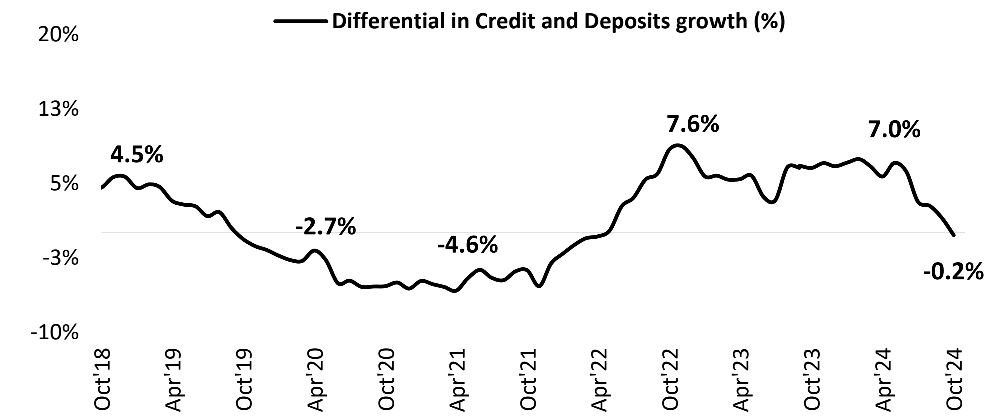
Deposit growth of 11.7% surpasses credit growth of 11.5%

Exhibit 13: Deposit growth stood at 11.7% YoY, while credit growth was ~11.5% YoY



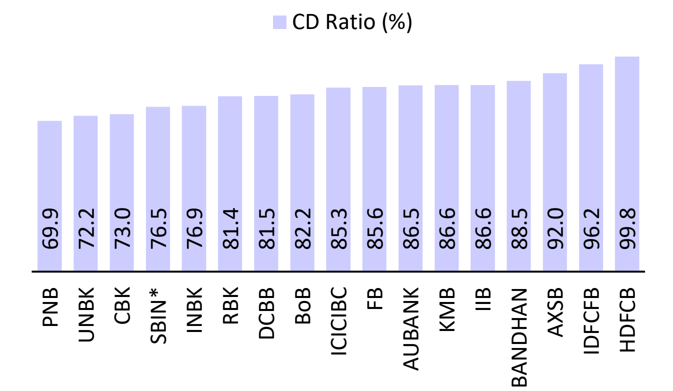
Credit growth adjusted for HDFC merger; Source: MOFSL, RBI

Exhibit 14: Deposit growth has surpassed credit growth after a gap of more than two years



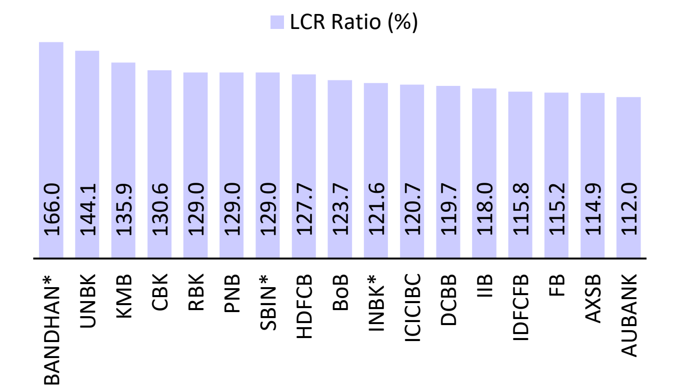
Source: MOFSL, RBI

Exhibit 15: CD ratio remained high for PVBs; PSBs had a lower CD ratio (as of 2QFY25)



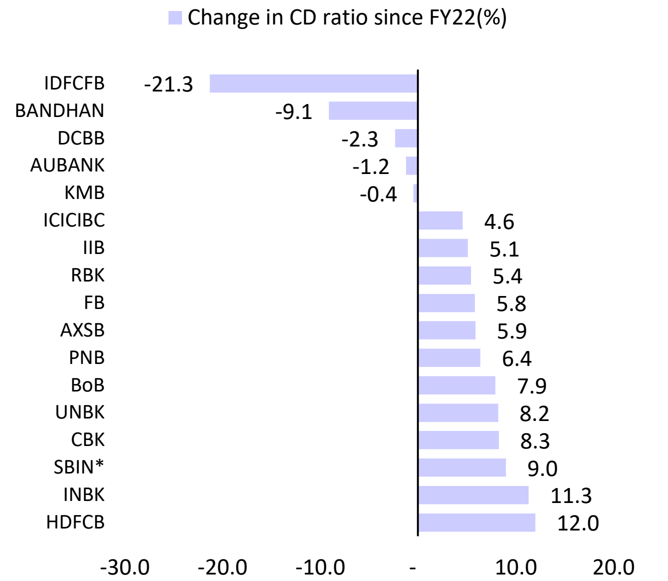
Higher CD ratio for HDFCB amid merger; Source: MOFSL, Company

Exhibit 16: LCR ratio was healthy for most PSBs; PVBs' ratio in the range of 112-136%



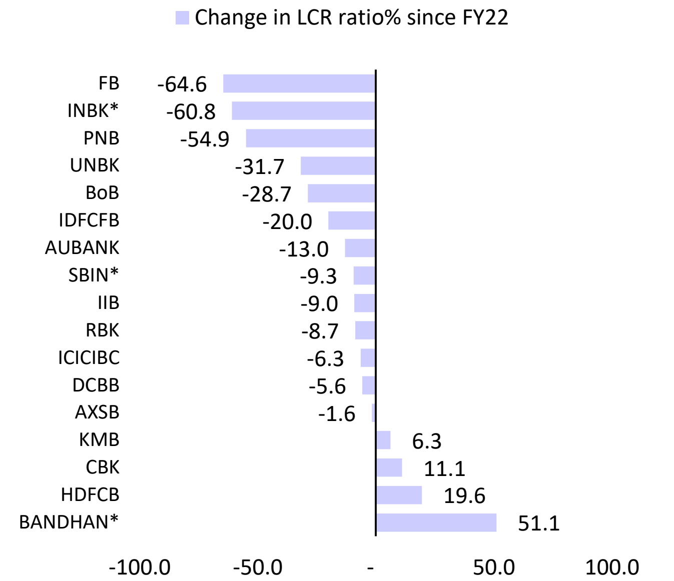
*data as on 1QFY25, Source: MOFSL, Company

Exhibit 17: CD ratio increased for most banks since FY22 – the increase was more for PSBs than PVBs



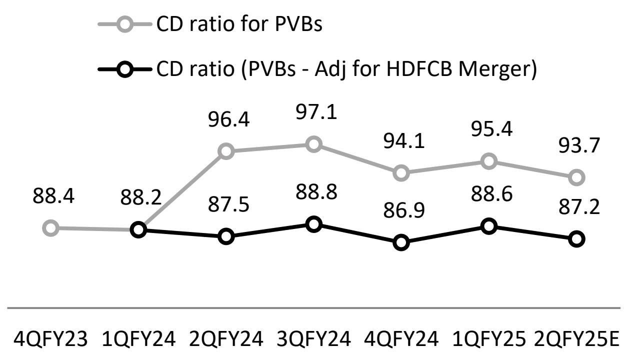
Higher CD ratio for HDFCB amid the merger; * data as on 1QFY25, Source: MOFSL, Company

Exhibit 18: Change in LCR ratio since FY22 – most banks have deployed excess liquidity on their balance sheets



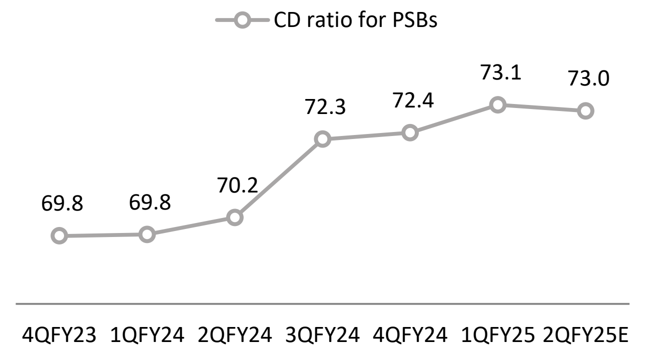
*data as on 1QFY25, Source: MOFSL, Company

Exhibit 19: CD ratio for PVBs declined to 93.7% (87.2% adj for HDFCB Merger)



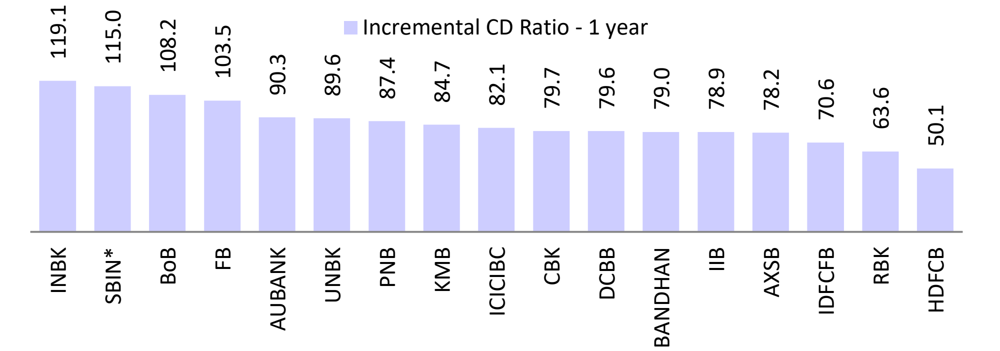
2QFY25E numbers projected as per MOSL estimates, Source: MOFSL, Company

Exhibit 20: CD ratio for PSBs increased to 73%



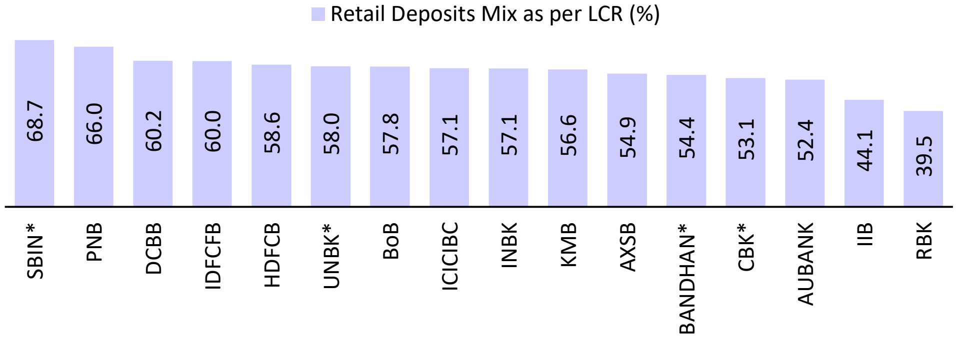
2QFY25E numbers projected as per MOSL estimates, Source: MOFSL, Company

Exhibit 21: Incremental CD ratio has been high for most PSBs



*data as on 1QFY25, Source: MOFSL, Company

Exhibit 22: Retail deposits across banks as per LCR



*indicates data as on 1QFY25, Source: MOFSL, Company

Exhibit 23: Yields and cost ratios for key banks – 2QFY25

%	YoF			YoA			CoF			CoD		
	2QFY25	YoY (bp)	QoQ (bp)	2QFY25	YoY (bp)	QoQ (bp)	2QFY25	YoY (bp)	QoQ (bp)	2QFY25	YoY (bp)	QoQ (bp)
AXSB*	9.4	-6.1	-17.0	10.2	-21.4	-9.1	5.5	28.0	1.0	6.6	15.2	0.3
HDFCB**	9.4	-127.9	-147.5	9.8	-155.3	-167.1	4.9	10.0	0.0	NA	NA	NA
ICICIBC	8.6	-1.0	-6.0	9.7	-8.0	-7.0	5.1	31.0	4.0	4.9	35.0	4.0
IDFCFB**	13.5	-31.8	-53.0	15.4	-46.8	-50.6	6.7	1.0	-19.6	NA	NA	NA
IIB	9.7	0.0	-18.0	12.3	1.0	-26.0	5.6	21.0	-1.0	6.6	20.0	2.0
KMB**	10.1	-24.4	-9.6	10.8	3.4	-4.8	5.2	37.0	5.0	NA	NA	NA
RBK***	12.4	44.7	-21.4	13.5	-49.0	-63.0	6.6	24.0	-6.0	6.5	32.0	0.0
AUBANK***	14.4	110.0	0.0	16.5	222.3	28.2	7.0	34.0	1.0	NA	NA	NA

* YoF and YoA are calculated ** All ratios are calculated *** YoF is calculated Source: MOFSL, Company

Exhibit 24: NIM progression over the past two years

NIM (%)	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25
AXSB	3.96	4.26	4.22	4.10	4.11	4.01	4.06	4.05	3.99
HDFCB	4.10	4.10	4.10	4.10	3.40	3.40	3.44	3.47	3.46
ICICIBC	4.31	4.65	4.90	4.78	4.53	4.43	4.40	4.36	4.27
IDFCFB	5.98	6.36	6.41	6.33	6.32	6.42	6.35	6.22	6.18
IIB	4.24	4.27	4.28	4.29	4.29	4.29	4.26	4.25	4.08
KMB	5.15	5.47	5.75	5.57	5.22	5.22	5.28	5.02	4.91
FB	3.30	3.49	3.31	3.15	3.16	3.19	3.21	3.16	3.12
BoB	3.33	3.37	3.53	3.27	3.07	3.10	3.27	3.18	3.10
CBK	2.86	3.05	3.07	3.05	3.00	3.03	3.07	2.90	2.86
PNB	3.00	3.16	3.24	3.08	3.11	3.15	3.10	3.07	2.92
SBIN	3.32	3.50	3.60	3.33	3.29	3.22	3.30	3.22	3.19
UNBK	3.15	3.21	2.98	3.13	3.18	3.08	3.09	3.05	2.90
INBK	3.20	3.74	3.59	3.61	3.52	3.49	3.52	3.53	3.49
AU SFB	6.20	6.20	6.10	5.72	5.50	5.50	5.10	6.00	6.05
RBK	5.02	5.27	5.62	5.53	5.54	5.52	5.45	5.67	5.35
BANDHAN	7.00	6.50	7.30	7.30	7.20	7.20	7.60	7.60	7.40
DCBB	3.88	4.02	4.18	3.83	3.69	3.48	3.62	3.39	3.27

Source: MOFSL, Company

Our View: Maintain preference for ICICIBC, HDFCB, SBI, FB, and AUBANK

- We keenly monitor the FY25 margin trajectory, as a potential turn in the interest rate cycle would adversely impact lending yields. Banks with a higher proportion of fixed loan books are expected to fare better and report NIM expansion or stable NIMs in FY26.
- We remain vigilant about margins and the delinquency cycle in unsecured loans, and expect the credit cost to inch up for select banks.
- With most of the 2QFY25 earnings now behind (barring SBIN and Equitas), we have further cut by ~1% our aggregate earnings estimates for PVBs, led by IIB, IDFCB and RBK. We expect the aggregate earnings to grow at 8% YoY. Looking forward, we anticipate earnings momentum to pick up, projecting PAT growth of 16% in FY26 and 18% in FY27.
- For PSBs, despite a solid 2QFY25 performance, we have marginally raised FY25 earnings estimates by 0.5% (pending SBIN's earnings). We estimate aggregate earnings growth for PSBs to moderate to 11-13% over FY26-27.
- **Our top picks are ICICI, HDFCB, SBI, FB, and AUBANK.**

NOTES

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

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

Disclosures

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

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

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 at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months

- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.
- The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

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

Analyst Certification

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

Terms & Conditions:

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

Disclaimer:

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

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

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

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

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

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN .: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

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