Motilal Oswal Financial Services

EcoScope
The Economy Observer

US bond yields may remain elevated

- **During the past three months, the benchmark 10-year US treasury yield has surged toward 4.75%, about 100bp higher than the mid-Jul'23 level. Notably, the rise in the yield is not limited only to the longer end, but it is seen across the curve and more at the shorter end, as the spread between the 3-month yield and the 10-year yield has actually narrowed from -1.5pp in mid-Jul'23 (and 4-decade low of -1.89pp in early Jun'23) to -0.9pp in Oct'23, last seen in early 2023. (All data used here is as of 16th Oct'23).**
- **If the cost of funds increases sharply and continuously, it is usually believed to hurt borrowers. Nevertheless, since a bulk (~90%) of household loans are fixed-term, higher rates have not pinched customers in the US. Because of this, the burden of higher interest rates will be borne by the lenders, due to the higher cost of roll-over and/or refinancing the loans. On top of this, the financial institutions also see a drop in the value of their securities portfolios due to higher interest rates.**
- **Moreover, although higher rates may not affect existing customers, they are likely to affect new demand badly, hurting home prices. This, if happens, will have the potential to broaden and sharpen the economic slowdown. However, mortgage/non-mortgage loans continue to grow decently, which shows that consumers are not worried so far.**
- **None of these troublesome implications, thus, have played out so far. Our expectation of a serious US slowdown by mid-2023 did not materialize, and even the soft landing theory has been elusive. The US economy remains strong, supported by the drawdown in savings by US consumers, which is in contrast to most other rich nations.**
- **However, this is unlikely to continue for a long period, especially if bond yields stay so elevated. Only ~8% of the market participants expect a rate hike on 1st Nov'23, down from 33% a month ago, and 29% expect it in Dec'23 (up from 2.3% a month ago). It means that the majority of participants would be surprised if the US Federal Reserve delivers another rate hike, like they projected in their Sep'23 policy meeting.**
- **We believe that even if the Fed does not hike rates in the next meeting, it cannot afford to loosen its stance. If so, bond yields will remain elevated, and the longer they stay high, the higher the risk of an economic slowdown is. Accordingly, we push our expectation of a US economic slowdown into 1HCY24.**

US bond yields have risen across the curve

During the past three months, the benchmark 10-year US treasury yield has surged toward 4.75%, about 100bp higher than the mid-Jul'23 level. This is the highest level in almost 16 years *(Exhibit 1)*. Notably, the rise in the yield is not limited to the longer-end. The rise is more at the shorter end, with the 3-month yield on treasury bills at almost 23-year high of 5.6%. The spread between 3-month and 10-year yield, thus, has narrowed from -1.5pp in mid-Jul'23 (and 4-decade low of -1.89pp in early Jun'23) to -0.9pp in Oct'23, last seen in early-2023 *(Exhibit 2)*.

Exhibit 1: US bond yields have risen to multi-year high in recent months…

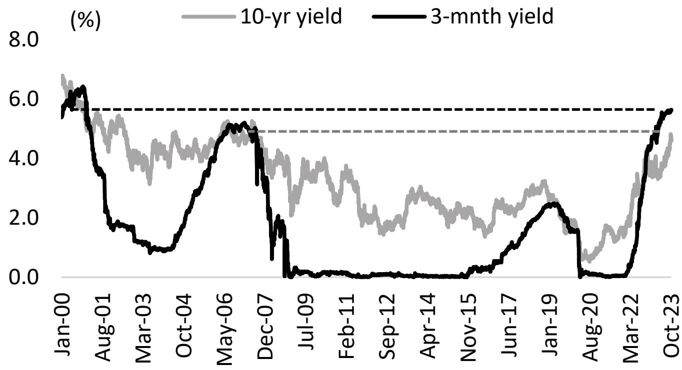
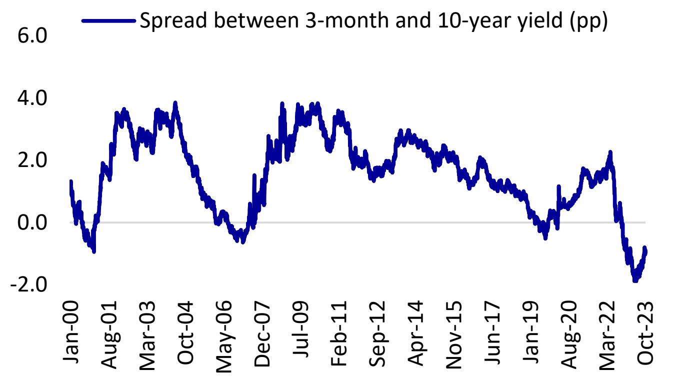


Exhibit 2: …but the spread between 3-month and 10-yr yield has narrowed



All data as of 16th October 2023

Source: US Department of Treasury, CEIC, MOFSL

Nikhil Gupta – Research analyst (Nikhil.Gupta@MotilalOswal.com)
Tanisha Ladha – Research analyst (Tanisha.Ladha@MotilalOswal.com)

Unrealized losses of the financial institutions have surged

If the cost of funds increases sharply and continuously, it is usually believed to hurt borrowers. Nevertheless, since a bulk (~90%) of household loans are fixed-term, higher rates have not pinched customers. Because of this, the burden of higher interest rates will be borne by lenders, due to the higher cost of roll-over and/or refinancing the loans. On top of this, financial institutions also see a drop in the value of their securities portfolios due to higher interest rates.

According to the Federal Deposit Insurance Corporation (FDIC), the unrealized losses on investment securities of all the FDIC-insured institutions in the US have amounted to close to or more than USD500b during the past five quarters. Since the Fed started hiking interest rates in Mar'22, unrealized gains have disappeared (from USD29.4b in 3QCY21) and large losses (totaling USD558b in 2QCY23) have emerged *(Exhibit 3)*. The unrealized losses are divided in the ratio of 45:55 between available-for-sale (AFS) and held-to-maturity (HTM) securities portfolios.

Exhibit 3: Unrealized losses have surged massively since mid-CY22…

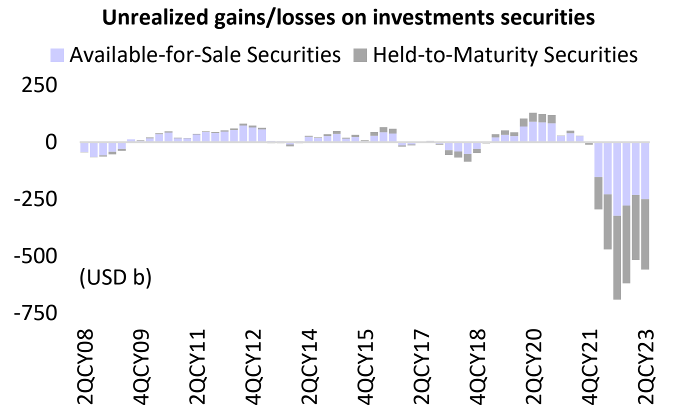
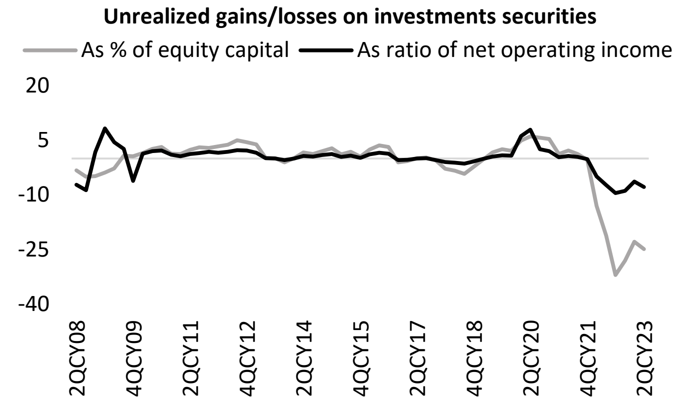


Exhibit 4: …amounting to ~25% of total equity capital of these institutions



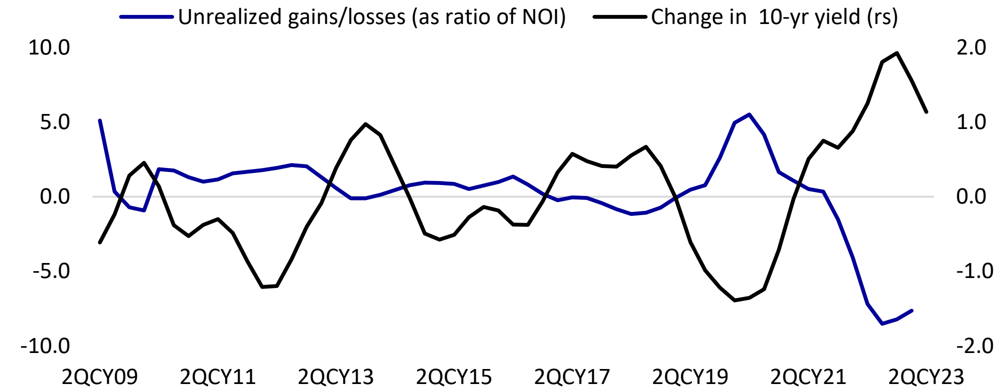
Source: FDIC, CEIC, MOFSL

For the size of the US economy, half a trillion dollars may not sound like a big loss, but note that this amounts to almost a quarter of the entire equity capital of all these institutions and more than 7x of their net operating income *(Exhibit 4)*.

We are not suggesting that all these losses will be realized. However, it is probable that some institutions may be forced to unwind their positions unwillingly, making it economically very difficult for them to survive. Overall, it may not bring down the entire financial sector, but it definitely holds the potential to send chills. Of course, timely intervention by an extremely active US Fed could change the course.

The FDIC has maintained this data since 1QCY08, i.e., for the last 15 years. Plotting it against the 10-year US treasury bond yield confirms a decent inverse correlation between the two, i.e., higher yields lead to lower gains/larger losses and vice-versa. It is, thus, very likely that these unrealized losses would have likely increased further in 3QCY23, since the benchmark US bond yield crossed 4% for the first time on quarterly basis since FDIC data is available *(Exhibit 5)*.

Exhibit 5: Unrealized gains/losses are connected with US 10-yr yield



All data is 3-quarter moving average Change in 10-yr yield represents YoY change in yield per quarter
Source: RBI, CSO, Various national sources, CEIC, MOFSL

Mortgage market shows some signs of weakness, but home prices stable

It is widely, and correctly, argued that higher interest rates are unlikely to hurt existing borrowers since most of them are on fixed-rate mortgages. In contrast to many European nations, more than 90% of mortgage loans are on a fixed rate, saving the borrowers from steep rate hikes witnessed in the past 18 months. Not surprisingly then, the effective interest rate (interest payments divided by outstanding loans) on outstanding US mortgage debt has risen only marginally from its 46-year low of 3.3% in 1QCY22 to 3.6% in 2QCY23 *(Exhibit 6)*. Further, a comparison of the household debt service ratio (DSR) of the US vs. other major advanced nations confirms that it has not risen tremendously in the US *(Exhibit 7)*.

Exhibit 6: Effective interest rate on mortgage debt in the US has risen marginally recently…

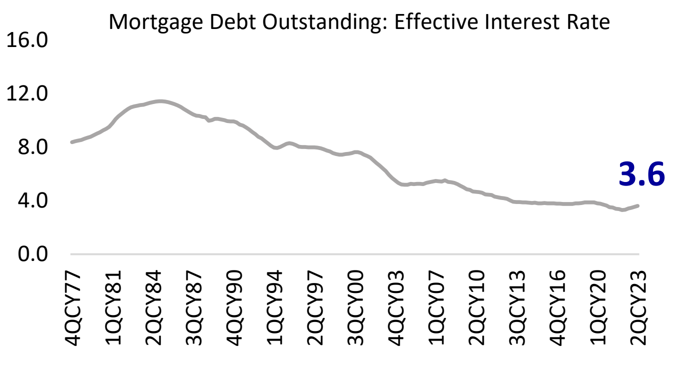
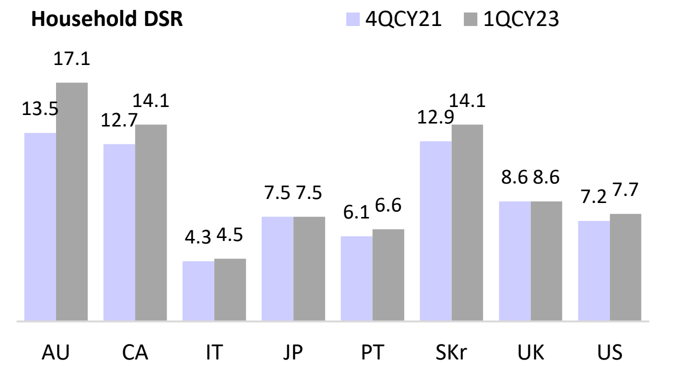


Exhibit 7: …and household DSR has also increased slightly compared to many other rich nations



Source: US Federal Reserve, BIS, CEIC, MOFSL

Moreover, although higher rates may not affect existing customers, they are likely to affect new demand badly, hurting home prices. A look at the mortgage applications confirms that the market composite index, a measure of mortgage loan application volume, has fallen to the lowest level in more than 28 years, i.e. since mid-1995 *(Exhibit 8)*. Home prices, however, have improved in the last couple of months, after witnessing some pressures in 1HCY23 *(Exhibit 9)*. Moreover, mortgage/non-mortgage loans also continue to grow decently, which shows that consumers are not worried so far.

Exhibit 8: Mortgage loan applications volume has declined sharply…

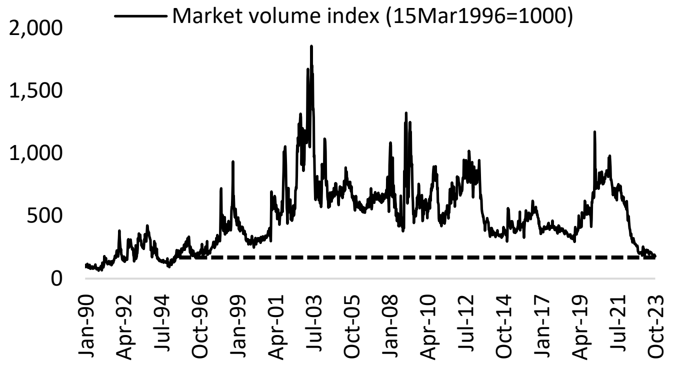
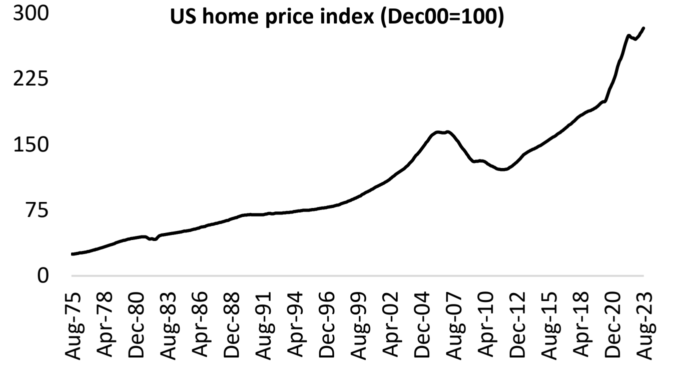


Exhibit 9: …but home prices have stabilized in recent months, after falling in 1HCY23

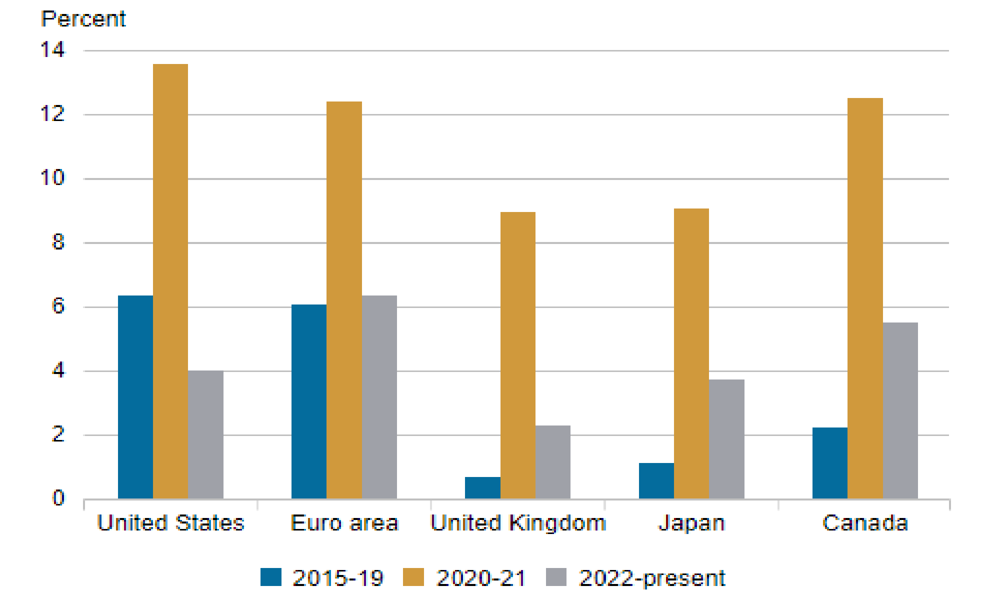


Source: Mortgage Bankers' association, Freddie Mac, CEIC, MOFSL

No hard or soft landing thanks to spendthrift US consumers

In sum, none of these troublesome implications have played out so far. Our expectation of a serious US slowdown by mid-2023 did not materialize, and even the soft landing theory has been elusive. As far as the economic activity is concerned, it has surprised positively month after month. One of the key reasons for such strong US economic growth amid the weakening global economy is the different behavior of US households. In stark contrast to their counterparts in other major nations, US households have eaten into their savings, supporting consumption, and thus real GDP growth. In a recent analysis posted by the Federal Reserve Bank of New York (FRBNY) in their popular blog called Liberty Street Economics, the authors conclude that spending pandemic-led savings is an "only-in-the-US" phenomenon *(Exhibit 10)*. Their analysis found that *"…The average U.S. saving rate since 2022 is down some 2.5 percentage points from the 2015-19 average. Saving rates elsewhere range from slightly above pre-pandemic norms (0.5 percentage point higher in the euro area) to markedly above (3.5 percentage points higher in Canada)…"*.

Exhibit 10: Household savings rate above pre-pandemic levels outside the US



Data are through the second quarter of 2023 for the U.S., euro area, UK, and Canada, and through the first quarter of 2023 for Japan

Source: *"Spending Down Pandemic Savings Is an "Only-in-the-U.S." Phenomenon,"* Federal Reserve Bank of New York Liberty Street Economics, October 11, 2023

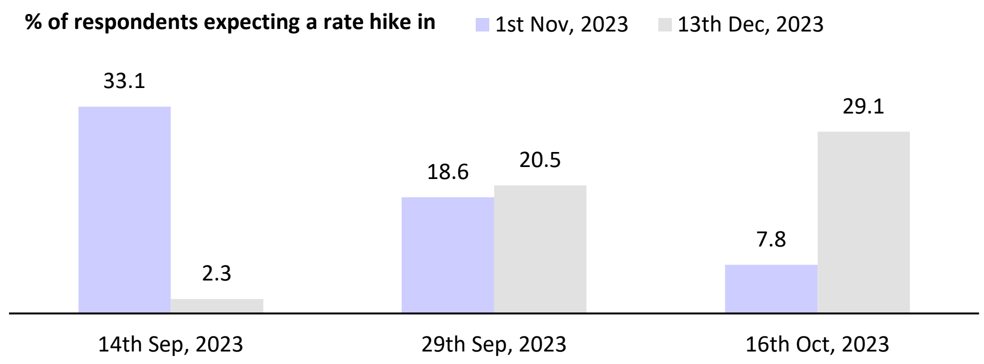
Assuming ceteris paribus, this drawdown (or excess) savings by US households in the pandemic helped keep consumption and real GDP growth higher. *"…If the U.S. saving rates had remained at the pre-pandemic average value (implying zero excess saving), the two indexes would have tracked in tandem. Real consumption would then be some 3 percent lower than at present for the given level of income. By itself, this would leave real GDP about 2 percent lower…"*.

US bond yields could remain elevated for long

All-in-all, a significant feel-good virtuous loop seems to be in effect at this stage in the US. The households are drawing down their savings (for reasons that are not very clear), boosting their consumption and real GDP growth, which in turn is helping the producers to continue making strong profits, increasing production and keeping employment high. Accordingly, the unemployment rate remained at 3.8% in Sep'23, close to a record low of 3.5% a few months ago.

However, this is unlikely to continue for a long period of time, especially if the bond yields stay so elevated. Only ~8% of the market participants expect a rate hike on 1st Nov'23, down from 33% participants a month ago, and 29% are expecting it in Dec'23 (up from 2.3% a month ago). It means that the majority of participants would be surprised if the US Fed delivers another rate hike, like they projected in their Sep'23 policy meeting *(Exhibit 11)*.

Exhibit 11: Rate hike expectations have moderated in the past one month



Source: Bloomberg, MOFSL

We believe that even if the US Fed does not hike rates in the next policy meeting, it cannot afford to loosen its stance. If so, bond yields will remain elevated, and the longer they stay high, the higher the risk of an economic slowdown is. Accordingly, we push our expectation of a US economic slowdown into 1HCY24.

In short, neither the financial sector has realized the accumulating large losses on their books nor has new activity weakened dramatically so far. It will not be surprising if both of them happen simultaneously, making the job of policymakers extremely difficult.

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") (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 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.

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.