22 September 2023

Economy

FOMC's Goldilocks projections overlook impending fiscal drag, especially from student-loan repayments

We expect US real GDP to grow above 4% QoQsaar in Q3CY23, inducing a further 25bp hike in the Fed Funds rate at the FOMC's meeting on 1st Nov'23. At this week's meeting, the FOMC's median projections suggested a Goldilocks economy in CY23, with real GDP growing 2.1% (vs the projection of 1% in Jun'23) while core PCE inflation was projected to end CY23 at 3.7% (vs 3.9% previously). But the US economy has benefited from a persistent fiscal stimulus over recent quarters. This will be abruptly withdrawn in Q4CY23, with a cap on non-defense discretionary spending coming into force as part of the debt ceiling deal agreed in May'23, and student loan interest payments set to resume on 1st Oct'23. The consequent decline in personal consumption is still likely to tip the US into recession in Q4CY23-Q1CY24.

Resumed student-loan repayments to erode PCE from Q4CY23

The debt ceiling deal ended the moratorium on student-loan interest payments (which had been in place since Mar'20 as a form of covid relief). President Biden's plan to write-off some student loans (estimated to total USD440bn) was deemed unconstitutional by the US Supreme Court at end-Jun'23. So, interest began accruing on the entirety of the USD1.6trn of student loans from this month, and interest payments will resume on 1st Oct'23. These are estimated to reduce the average individual's disposable income by 8-9% in Q4CY23, thus eating into private consumption expenditure (the key pillar of US economic strength in recent quarters).

Inverted yield curve will win, helped by strong USD

The USD is likely to continue rallying in nominal effective terms, gaining against the EUR and GBP as those central banks face less pressure to raise rates as headline inflation abates. While a weakening USD boosted the US economy in H1CY23, the stronger USD will be a drag on net exports in Q4CY23 – helping tip the US economy into the recession that has been telegraphed by the persistently inverted yield curve since Jul'22. We expect the recession, combined with the YoY decline in M2 throughout CY23, to finally help rein-in core PCE inflation to 3% YoY by Mar'24, allowing the Fed to resume cutting its policy rate in Q2FY24.

Prasenjit K. Basu

prasenjit.basu@icicisecurities.com +91 11 4221 8338

US | Economy



_



Goldilocks economy implies smaller and later rate cut projections

The rate-setting Federal Open Market Committee (FOMC) chose to keep its policy rates unchanged at its Sep'23 meeting (as widely expected), but the committee's median projections for the economy were revised substantially upwards. In particular, the real GDP growth projection for CY23 was revised up from 1% (in Jun'23) to 2.1%, while the CY24 projection was also raised to 1.5% (from 1.1% in Jun'23). Despite the much higher projections for growth, the core PCE inflation projection was lowered slightly, to 3.7% for end-CY23 (from 3.9% in Jun'23) and unchanged at 2.6% for end-CY24.

This Goldilocks scenario ('not too hot, not too cold') would result in a soft-landing for the US economy, defying the persistent prediction of a recession indicated by the inverted yield curve. While the median FOMC projection remains for the Fed Funds rate to end CY23 at 5.6% (implying one more 25bp rate hike this year), the projection for end-CY24 has been raised to 5.1% (implying a 50bp reduction during next year, or just 25bp lower than the current Fed Funds rate).

Exhibit 1: FOMC's Goldilocks projections: Faster growth, slower inflation, but smaller and later rate cuts

	Median ¹					Central Tendency ²					Range ³				
Variable	2023	2024	2025	2026	Longer run	2023	2024	2025	2026	Longer run	2023	2024	2025	2026	Longer run
Change in real GDP June projection	$2.1 \\ 1.0$	1.5 1.1	1.8 1.8	1.8	1.8 1.8	1.9-2.2 0.7-1.2	1.2-1.8 0.9-1.5	1.6-2.0 1.6-2.0	1.7-2.0	1.7-2.0 1.7-2.0	1.8 - 2.6 0.5 - 2.0	0.4-2.5 0.5-2.2	1.4-2.5 1.5-2.2	1.6-2,5	1.6-2.5 1.6-2.5
Unemployment rate June projection	$3.8 \\ 4.1$	$\frac{4.1}{4.5}$	$4.1 \\ 4.5$	4.0	4.0 4.0	3.7 - 3.9 4.0 - 4.3	3.9 - 4.4 4.3 - 4.6	3.9-4.3 4.3-4.6	3.8-4.3	3.8-4.3 3.8-4.3	3.7 - 4.0 3.9 - 4.5	3.7 - 4.5 4.0 - 5.0	3.7 - 4.7 3.8 - 4.9	3.7-4.5	$\begin{array}{c} 3.5 - 4.3 \\ 3.5 - 4.4 \end{array}$
PCE inflation June projection	3.3 3.2	$2.5 \\ 2.5$	$2.2 \\ 2.1$	2.0	2.0 2.0	3.2 - 3.4 3.0 - 3.5	2.3-2.7 2.3-2.8	2.0-2.3 2.0-2.4	2.0-2.2	2.0 2.0	3.1 - 3.8 2.9 - 4.1	2.1 - 3.5 2.1 - 3.5	2.0-2.9 2.0-3.0	2.0-2.7	2.0
Core PCE inflation ⁴ June projection	3.7 3.9	$2.6 \\ 2.6$	$2.3 \\ 2.2$	2.0		3.6 - 3.9 3.7 - 4.2	2.5-2.8 2.5-3.1	2.0-2.4 2.0-2.4	2.0-2.3		3.5 - 4.2 3.6 - 4.5	2.3 - 3.6 2.2 - 3.6	2.0-3.0 2.0-3.0	2.0-2.9	
Memo: Projected appropriate policy path Federal funds rate June projection	5.6 5.6	5.1 4.6	3.9 3.4	2.9	2.5 2.5	5.4 - 5.6 5.4 - 5.6	4.6-5.4 4.4-5.1	3.4 - 4.9 2.9 - 4.1	2.5-4.1	2.5-3.3	5.4 - 5.6 5.1 - 6.1	4.4 - 6.1 3.6 - 5.9	2.6-5.6 2.4-5.6	2.4-4.9	2.4-3.8

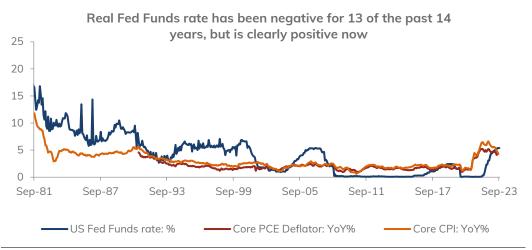
Source: FOMC

Core MoM inflation has eased, but needs to abate more

The Fed Funds rate remains at 5.25-5% (i.e., a central rate of 5.375%), well above both the core PCE inflation rate (4.2% YoY in Jul'23) and the core CPI inflation rate (4.3% YoY in Aug'23). Crucially, both core CPI (+0.3% MoM, or 3.6% annualised) and core PCE (+0.2% MoM, or 2.4% annualised) grew at a more moderate MoM pace than the headline YoY growth pace in the latest month, implying that the momentum of core inflation has begun slowing slightly. But, MoM changes need to abate further if core inflation is to be brought closer to the 2% YoY target – having consistently remained above 4% YoY since Oct'21.



Exhibit 2: Real policy rate positive now, despite core inflation exceeding 4% YoY for nearly 2 years



Source: I-Sec, based on data from FRB, Bureau of Economic Analysis, Bureau of Labor Statistics

Eight months of M2 contraction haven't sufficed to rein in core inflation much

Our view since the beginning of CY22 has been that the excessively rapid money supply (M2) growth in Mar'20-Feb'22 (averaging 18.2% YoY over the period, vs an average of 6.8% YoY and a peak of 10.4% YoY in the 60 years preceding covid) would inevitably keep inflation high, force rapid hikes in the Fed Funds rate and result in a recession by CY24 (see <u>Monetary Policy errors have raised the risk of recession by 2024</u>, 7th Apr'22). Since Dec'22, M2 has had to contract YoY (for the first time since 1945) declining 3.7% YoY in Jul'23 as quantitative tightening resumed after a two-month hiatus. But this has not yet sufficed to bring core inflation anywhere near the Fed's 2% YoY target.

Exhibit 3: Resumption of QT, and M2 contracting 3.7% YoY, but core inflation still too high



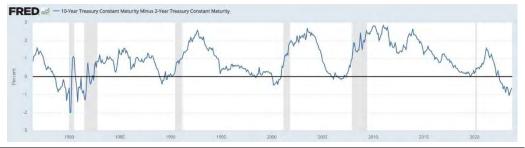
Source: I-Sec, based on data from FRB and CEIC



With real GDP likely growing over 4% in Q3CY23, expect a 25bp hike in Nov'23

Aided by a large fiscal stimulus, which has taken the US fiscal deficit to 8.6% of GDP in the year to Jun'23 (with a large deficit still likely in the current quarter), US real GDP growth is likely to stay strong in Q3CY23, accelerating to above 4%QoQsaar growth for the quarter. The Atlanta Fed's GDPNow estimate for the quarter is 4.9% growth. Given such rapid growth, and the persistence of excessively high core inflation, the Fed is likely to raise the Fed Funds rate by another 25bp (to a range of 5.5-5.75%, or a central rate of 5.625%) at its next FOMC meeting (ending 1st Nov'23). We have maintained a steady forecast since the beginning of CY23 of the Fed Funds rate peaking at 5.5%, so this represents a slight increase in our forecast target for the Fed Funds rate.

Exhibit 4: US yield curve remains severely inverted, still predicting recession ahead



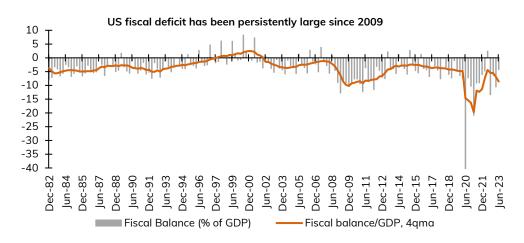
Source: FRB-St. Louis

Fiscal impulse to weaken as spending restraints and student loan repayments kick-in from Oct'23

The US 10-year minus 2-year yield spread has remained consistently inverted since 5th Jul'22. Although (at -0.63pp currently) the inversion is less severe than at its worst point (-1.08pp on 3rd Jul'23), it continues to signal a recession ahead. We expect that the persistence of high interest rates across maturities will begin to weigh on domestic demand, particularly private consumption. The ongoing fiscal stimulus will diminish as the deficit narrows from Q4CY23, particularly since the spending restraints kick-in at the start of the next fiscal year (Oct'23). And, with President Biden's massive studentloan forgiveness program deemed unconstitutional by the Supreme Court (at the end of Jun'23), at least USD440bn of student-loans, which the Biden administration had sought to forgive, will need to be serviced from 1st Oct'23 onwards. Since Mar'20, there was a moratorium on student-loan repayments as part of the US policy response to the covid pandemic - benefitting 27mn Americans - but that moratorium ended as part of the debt-ceiling deal. As of Sep'23, interest has started accruing on all USD1.6trn of student loans, and repayments must resume from 1st Oct'23. Although US households still have excess savings built up via the three stimulus cheques they received in Apr'20-Mar'21, the additional student-debt service payments are expected to account for 37% of the excess savings of individuals outside the top-20% of income earners, and reduce monthly personal disposable income by 8-9% on average. There will clearly be a significant negative impact on personal consumption (the key driver of the US economy in recent quarters).



Exhibit 5: US fiscal deficit at 8.6% of GDP in the year to Jun'23; to decline from Q4CY23



Source: I-Sec, based on data from US Bureau of Economic Analysis

Stronger USD reining in net external demand, plus fiscal contraction, to still tip the US into recession in Q4CY23-Q1CY24

We expect the USD's NEER (DXY) to continue the rebound that began in the third week of Jul'23. There will be less pressure on the ECB and BoE to tighten policy as headline inflation moderates (since they target headline rather than core inflation), so the yield differential will begin to favour the USD. Thus net exports will be more of a drag on growth in Q4CY23. We expect the combination of a reduced fiscal impulse and a strengthening USD to sufficiently weaken aggregate demand to tip the US into recession in Q4CY23 and Q1CY24, thereby also contributing to further reducing core PCE inflation as M2 contracts YoY through the rest of CY23. The earliest possibility of a US rate cut continues to be in Q2CY24, after core PCE inflation has moderated below 2.5% YoY.



Recent reports

Date	Report
16-09-2023	Green shoots of a goods export rebound emerge, while the expanding services surplus suggests no FY24 CAD
13-09-2023	Industrial output accelerates, but still-elevated non-core CPI inflation is set to moderate
12-09-2023	China's structural over-capacity triggers a widening financial crisis; but its banks are still liquid
01-09-2023	Economic momentum is robust despite some seeming fiscal deterioration
21-08-2023	'Bidenomics' delays recession: high core inflation and fiscal deficits to buoy bond yields all year
15-08-2023	Inflation surge in Jul'23 tempered by lower core inflation; industrial rebound moderates a tad
11-08-2023	RBI keeps policy rate unchanged but raises a red flag on vegetable inflation; rate cut likely only in Apr'24
02-08-2023	Twin Deficit Watch: Fiscal improvements slowed in Q1FY24, but CAD likely to vanish in FY24
27-07-2023	FOMC's 25bp hike restores a positive real Fed Funds rate; we think the hiking cycle is nearly done
17-07-2023	Goods exports and imports slump, but improving goods and services trade balances bode well for CAD
14-07-2023	China's tepid recovery reflects a slow-burning crisis of over-capacity in industry and real estate
13-07-2023	Industrial recovery gains traction; but with inflation edging higher, a rate cut is unlikely before Jan'24
29-06-2023	CAD set to shrink further as the dynamism of services is complemented by a likely rebound in goods exports
16-06-2023	Trade deficit shrinks faster in Apr-May'23; CAD likely to be minimal in Q1FY24 and all of FY24
15-06-2023	FOMC pauses, but dot plot suggests at least 2 more hikes likely; we still expect Fed Funds to peak at 5.5%
14-06-2023	Inflation abates to below the RBI's projection, making a rate cut by Oct'23 more likely; industrial growth is steady
01-06-2023	Real GDP likely to continue being buoyed by net exports and investment, as the government's borrowing declines
31-05-2023	Declining imports mainly reflect falling import prices, not declining domestic demand
24-05-2023	US default remains unlikely, but this is Round 1 of protracted negotiations to cut excessive public debt
17-05-2023	Trade deficit narrows, likely pushing the current account into surplus for another couple of quarters
16-05-2023	Inflation recedes enough to preclude more tightening; industrial fragility suggests room for rate cuts by Q3FY24
04-05-2023	Global growth prospects clouded, but India's 7%+ real GDP growth to be spurred by investment and net exports
13-04-2023	Goldilocks redux: Industrial output accelerates in Jan-Feb'23, inflation recedes in Mar'23
03-04-2023	Twin Deficit Watch: CAD on track to stay below 2% of GDP in FY23, fiscal deficit below 6% of GDP
23-03-2023	FOMC hikes 25bp (as expected); its dot plots suggest another 25bp hike in CY23 and mild recession ahead
22-03-2023	CA surplus likely in Q4FY23, and services to provide a fillip in FY24 too amid slowing goods trade
15-03-2023	Elevated core inflation requires further US tightening; banking woes to necessarily alter the mix of measures
13-03-2023	Industrial output accelerates in Jan'23, spurred by capex; labour-intensive manufacturing remains a drag
28-02-2023	US inflation shock implies more aggressive tightening ahead, while a recession remains imminent
16-02-2023	Trade deficit likely to narrow sharply in Jan-Sep'23, but labour-intensive export revival remains elusive
14-02-2023	Inflation spike illusory (distorted by food-grain weights), but could induce a hawkish policy response
10-02-2023	RBI stays hawkish; we expect inflation to recede faster than RBI projects, requiring no more hikes in CY23
08-02-2023	US Economy: Recession imminent, but more monetary tightening needed to tame inflation
02-02-2023	FY24 Budget: Balancing act achieves fiscal prudence while boosting capex further
31-01-2023	Twin Deficit Watch: Revenue strength provides room for manoeuvre on the Budget; CAD set to moderate
13-01-2023	Goldilocks economy? Industrial growth rebounds and inflation continues to abate
29-12-2022	Twin Deficit Watch: CAD likely peaked in Q2FY23; fiscal improvement persists despite higher subsidies
15-12-2022	Recession inevitable amid Fed hawkishness: inflation will wane and rate cuts are likely in H2CY23
13-12-2022	A positive real rate is restored, as inflation abates and industrial output also wanes
13-12-2022	Foreign exchange reserves being rebuilt, as INR holds steady against a depreciating USD
07-12-2022	RBI tightens monetary policy as expected; no further rate hikes are likely in FY23, in our view
01-12-2022	Fixed investment spending is being crowded-in as government borrowing stays below target

Economy | 22 September 2023



Date	Report
24-11-2022	Period of surging USD over, but India likely to persist with mildly weaker NEER
12-11-2022	Crises of domestic overcapacity and external overlending loom as Xi Jinping reduces focus on the economy
05-11-2022	Holding up half the sky: Developed economies head to recession, but emerging economies remain resilient
19-10-2022	Twin Deficit Watch: Sep'22 saw a positive shift in goods trade, while surging direct taxes buoyed the fiscal position
13-10-2022	Dismal industrial performance amid high food-driven inflation
03-10-2022	RBI raises repo rate as expected; external balances to improve as inflation differentials begin favouring INR
28-09-2022	Low external debt is underpinned by large voluntary capital inflows
22-09-2022	FOMC implicitly acknowledges its policy error; to front-load further rate hikes
21-09-2022	Supply-side measures sacrifice growth to slay inflation
01-09-2022	Investment-led recovery to buoy the economy amid global slowdown
30-08-2022	US Economy: Far from recession now, but clearly headed toward one by Q1CY24
22-08-2022	Growth will be marginally less robust as India sacrifices external strength to tackle inflation
28-07-2022	The global investment drought & China's quarter-century of over-investment
28-07-2022	FOMC surprises (a bit) positively, with another 75bps hike; suggests smaller hikes in future
15-07-2022	Twin Deficit Watch: Both deficits remain on a stable path, despite the noise
13-07-2022	Growth gains ground, but inflation remains troubling
16-06-2022	Tight labour market obliges the Fed to quickly reverse its policy error
08-06-2022	RBI hikes 50bp as expected; policy to focus on bringing inflation into line
01-06-2022	China faces the perfect storm: global tightening, capital flight, over-capacity
01-06-2022	Rebounding GFCF a positive in Q4FY22; will take the growth baton from exports in FY23
31-05-2022	IPEF and new FTAs to add medium-term dynamism to India's export engines
24-05-2022	Growth was under-estimated in CY21, but reforms will spur strong growth in CY22 and CY23
05-05-2022	MPC's inter-meeting rate hike: countering commodity inflation, and containing fallout from USD strength
30-04-2022	US Economy: Weak GDP print for Q1 ironically reflects ample evidence of an overheating economy
13-04-2022	Twin Deficit Watch: BoP current account to improve; revenue surge provides fiscal leeway for FY23
09-04-2022	Monetary policy remains accommodative, but with a subtly hawkish twist
07-04-2022	Monetary Policy errors have raised the risk of recession by 2024
30-03-2022	Firing on all monetary cylinders, China's "selection-year" rebound is being derailed by covid
25-03-2022	Global GDP to decelerate as FOMC tightens faster; robust external balances bolster India's monetary autonomy
16-03-2022	Binary risks from revival of the ICPOA (Iran nuclear deal) and the wider impact of financial sanctions on Russia
11-03-2022	A pro-incumbent win for BJP in 4 states, but longer-term challenger rises in Punjab
03-03-2022	Higher oil prices in H1CY22 (and lower in H2) to bring forward India's rate hikes
23-02-2022	The Risks from a Russia-Ukraine war: Higher oil prices, European recession
11-02-2022	RBI is in calm seas despite the storm of imminent US tightening
10-02-2022	A credible path toward crowding-in private investment
31-01-2022	Budget Preview: Robust fiscal health opens numerous policy options
25-01-2022	US Economy: Inflation is a monetary phenomenon; FF rate at 1.25% by end-2022 to contain it
21-01-2022	Re-globalisation to drive growth momentum in 2022



This report may be distributed in Singapore by ICICI Securities, Inc. (Singapore branch). Any recipients of this report in Singapore should contact ICICI Securities, Inc. (Singapore branch) in respect of any matters arising from, or in connection with, this report. The contact details of ICICI Securities, Inc. (Singapore branch) are as follows: Address: 10 Collyer Quay, #40-92 Ocean Financial Tower, Singapore - 049315, Tel: +65 6232 2451 and email: navneet_babbar@icicisecuritiesinc.com, Rishi_aqrawal@icicisecuritiesinc.com.

"In case of eligible investors based in Japan, charges for brokerage services on execution of transactions do not in substance constitute charge for research reports and no charges are levied for providing research reports to such investors."

New I-Sec investment ratings (all ratings based on absolute return; All ratings and target price refers to 12-month performance horizon, unless mentioned otherwise) BUY: >15% return; ADD: 5% to 15% return; HOLD: Negative 5% to Positive 5% return; REDUCE: Negative 5% to Negative 15% return; SELL: < negative 15% return

ANALYST CERTIFICATION

I/We, Prasenjit K. Basu, MPA, MA authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report. Analysts are not registered as research analysts by FINRA and are not associated persons of the ICICI Securities Inc. It is also confirmed that above mentioned Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months and do not serve as an officer, director or employee of the companies mentioned in the report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock brokering and distribution of financial products. Registered Office Address: ICICI Venture House, Appasaheb Marathe Marg, Prabhadevi, Mumbai - 400 025. CIN: L67120MH1995PLC086241, Tel: (91 22) 6807 7100. ICICI Securities is Sebi registered stock broker, merchant banker, investment adviser, portfolio manager, Research Analyst and Alternative Investment Fund. ICICI Securities is registered with Insurance Regulatory Development Authority of India Limited (IRDAI) as a composite corporate agent and with PFRDA as a Point of Presence. ICICI Securities Limited Research Analyst SEBI Registration Number – INH00000990. ICICI Securities Limited SEBI Registration is INZ000183631 for stock broker. ICICI Securities AIF Trust's SEBI Registration number is IN/AIF3/23-24/1292 ICICI Securities is a subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on <u>www.icicibank.com</u>.

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities and its analysts, persons reporting to analysts and their relatives are generally prohibited from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

Recommendation in reports based on technical and derivative analysis centre on studying charts of a stock's price movement, outstanding positions, trading volume etc as opposed to focusing on a company's fundamentals and, as such, may not match with the recommendation in fundamental reports. Investors may visit icicidirect.com to view the Fundamental and Technical Research Reports.

Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein.

ICICI Securities Limited has two independent equity research groups: Institutional Research and Retail Research. This report has been prepared by the Institutional Research. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, and target price of the Retail Research.

The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. 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 of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances. This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall 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. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. 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. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ICICI Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

ICICI Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction.

ICICI Securities or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the companies mentioned in the report in the past twelve months.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither ICICI Securities nor Research Analysts and their relatives have any material conflict of interest at the time of publication of this report.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities and ICICI Securities as a entity are engaged in various financial service businesses, they might have financial interests or actual/beneficial ownership of one percent or more or other material conflict of interest in various companies including the subject company/companies mentioned in this report.

ICICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report. Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

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 ICICI Securities and affiliates 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.

This report has not been prepared by ICICI Securities, Inc. However, ICICI Securities, Inc. has reviewed the report and, in so far as it includes current or historical information, it is believed to be reliable, although its accuracy and completeness cannot be guaranteed.



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. None of the research recommendations promise or guarantee any assured, minimum or risk free return to the investors.

Name of the Compliance officer (Research Analyst): Mr. Atul Agrawal, Contact number: 022-40701000, **E-mail Address** : <u>complianceofficer@icicisecurities.com</u> For any queries or grievances: <u>Mr. Prabodh Avadhoot</u> Email address: <u>headservicequality@icicidirect.com</u> Contact Number: 18601231122