

India Watch

Feb RBI MPC minutes: Caution and conservatism are key

Key remarks by MPC members

Dr. Shashanka Bhide: Given the implications of current elevated food inflation and the prevailing strong overall growth, there is a need to remain focused on achieving the inflation target in a sustained way. The transmission of increases in policy rates effected up to Feb'23 is still incomplete.

Dr. Ashima Goyal: Since growth is still robust and recent headline inflation has been near the upper tolerance band, we can wait a bit longer to ensure that inflation continues to move towards the target. Thus status quo, even though headline inflation FY25 projections of 4.5% gives room to cut. The stance should be interpreted in terms of policy rates still being disinflationary.

Even if the WACR exceeding the repo was due to unprecedented and extended large government cash balances, the toolkit to counter these and the many other shocks to which liquidity in India is subject to, can be expanded and activated.

Prof. Jayanth R. Varma: A real rate of 2% is not required at this stage to drive inflation down to the target of 4%. It is true that economic growth is holding up well, but there is no evidence at all that the economy is overheating. If the potential growth rate of the economy is close to 8%, then the economy is not at risk of overheating in FY25. A real interest rate of 1-1.5% would then be sufficient to glide inflation to the target of 4%. A real interest rate of 2% creates the very real risk of turning growth pessimism into a self-fulfilling prophecy. The time has come for the MPC to send a clear signal that it takes its dual mandate of inflation and growth seriously, and that it would not maintain a real interest rate that is significantly more than what is needed to achieve its target.

Dr. Rajiv Ranjan: Given the growth-inflation dynamics, and the uncertainty related to the inflation path going ahead, it would be better to continue with status quo to get more clarity on the current rabi crop and upcoming monsoon rains to further reaffirm our conviction of a durable downward trajectory of inflation towards 4%.

Markets are currently running ahead of policy makers worldwide including India. Any change in policy direction is going to have a multiplier effect. This is particularly tricky considering that transmission has slowed down in the last two months.

Today we are in a period of transition, which is a little delicate where neither forward guidance works nor pre-emptive policy actions. This makes the job of central banks even more difficult, especially since the last leg of disinflation is still pending. Caution and conservatism are the key during transition times.

Dr. Michael Debabrata Patra: Monetary policy must remain restrictive and maintain downward pressure on inflation while minimizing the output costs of disinflation. It is only when inflation subsides and stays close to the target lastingly that policy restraint can be eased.

Shri Shaktikanta Das: Monetary policy must remain vigilant and not assume that our job on the inflation front is over. As markets are front-running central banks in anticipation of policy pivots, any premature move may undermine the success achieved so far.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 4 to 5.

12662813

Timestamp: 22 February 2024 04:00PM EST

23 February 2024

GEM Economics
Asia | India

Aastha Gudwani
India Economist
BofAS India
+91 22 6632 8648
aastha.gudwani@bofa.com

Asia FI Strategy & Economics
Merrill Lynch (Hong Kong)

GEMs FI Strategy & Economics
BofAS

[See Team Page for List of Analysts](#)

Glossary

LAF: Liquidity adjustment facility
GDP: Gross Domestic Product
RBI: Reserve Bank of India
MPC: Monetary policy committee
CPI: Consumer Price Index
SDF: Standing deposit facility
MSF: Marginal Standing Facility
CRR: Cash Reserve ratio
LTV: Loan to Value
WACR: Weighted average call rate

Exhibit 1: MPC minutes Aug'23

MPC members unanimously voted for a pause. Barring Prof. Varma all members voted to retain withdrawal of accommodation

Dr. Shashanka Bhide	Given that inflation remains well above the target over the short term, with the projected headline CPI rate of above 5% up to Q1: 2024-25, there is a need to continue the policy support for sustaining the trajectory to the target
Dr. Ashima Goyal	Real GDP growth at 7% does not necessarily imply potential output is reached. Output is below potential if core inflation is below acceptable upper limit. Core inflation should continue to converge towards 4% and headline should converge to a stable core despite any further transient supply shocks. If inflation sustainably approaches 4% by the middle of 2024 real rates can easily become too high if nothing is done.
Prof. Jayanth R. Varma	A restrictive monetary policy must be maintained long enough to glide inflation to its target of 4%. As inflation drops well below the upper tolerance band, it is necessary to prevent the real interest rate from becoming excessive. A real rate of 2% exceeds the optimal, calibrate policy to take real rate to 1.5% If at all there is a stance, it should be neutral.
Dr. Rajiv Ranjan	Taken together, capital and TFP, along with favorable demographic dividends, could have led to a sustainable increase in the potential level of output of the economy. Monetary policy must continue treading a cautious path and remain prudent in its approach Given that inflation remains above target, our stance of withdrawal of accommodation also has to continue to aid fuller transmission. Apart from being premature, a change to neutral stance may have to bear the brunt of the collateral damage caused by wrong signaling.
Dr. Michael Debabrata Patra	Monetary policy has to remain on high alert with a restrictive stance. Food prices in India are the true underlying component of inflation. When these spillovers occur and are significant, monetary policy has to pre-emptively act to prevent generalization, irrespective of the fact that the initial shocks emanate from outside the realm of its influence. Hence the stance of withdrawing accommodation is apt. The recent GDP data release reinforces the view that the output gap in India has turned positive since the beginning of the year and remains so. This points to the likelihood of demand pull shaping the course of inflation.
Shri Shaktikanta Das	The projected inflation in Q3 of next year is perilously close to 5%. In these circumstances, monetary policy has to be actively disinflationary. We have to remain highly alert to any signs of generalization of price impulses that may derail the ongoing process of disinflation Any shift in policy stance now would be premature and risky. We have to remain vigilant and ready to act effectively in our journey towards 4% inflation target

Source: RBI

BofA GLOBAL RESEARCH

Exhibit 2: Member-wise voting pattern: On policy rate and stance

Rate actions have largely been unanimous, stance has seen some divergence

	Dr. Shashanka Bhide	Dr. Ashima Goyal	Prof. Jayanth R Varma	Dr. Rajiv Ranjan	Dr. Michael Debabrata Patra	Shri. Shaktikanta Das
Dec'22 Rate	Increase by 35bps	Increase by 35bps	Against 35bps hike	Increase by 35bps	Increase by 35bps	Increase by 35bps
Dec'22 Stance	Withdrawal of accommodation	Against the resolution	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Feb'23 Rate	Increase by 25bps	Pause in rate hike	No increase	Increase by 25bps	Increase by 25bps	Increase by 25bps
Feb'23 Stance	Withdrawal of accommodation	Against the resolution	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Apr'23 Rate	Voted unanimously to keep the rate unchanged					
Apr'23 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Jun'23 Rate	Voted unanimously to keep the rate unchanged					
Jun'23 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Aug'23 Rate	Voted unanimously to keep the rate unchanged					
Aug'23 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Oct'23 Rate	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged
Oct'23 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Dec'23 Rate	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged	Voted unanimously to keep the rate unchanged
Dec'23 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation
Feb'24 Rate	Voted for pause in rate	Voted for pause in rate	Voted for 25bp repo rate cut	Voted for pause in rate	Voted for pause in rate	Voted for pause in rate
Feb'24 Stance	Withdrawal of accommodation	Withdrawal of accommodation	Against the resolution	Withdrawal of accommodation	Withdrawal of accommodation	Withdrawal of accommodation

Source: RBI

BofA GLOBAL RESEARCH

Special Disclosures

In accordance with the SEBI (Foreign Portfolio Investors) Regulations, 2019 and with guidelines issued by the Securities and Exchange Board of India (SEBI), foreign investors (individuals as well as institutional) that wish to transact the common stock of Indian companies must have applied to, and have been approved as per SEBI (Foreign Portfolio Investors) Regulations, 2019. Each investor who proposes to transact common stock of Indian companies will be required to obtain Foreign Portfolio Investor (FPI) registration as per SEBI (Foreign Portfolio Investors) Regulations, 2019. Certain other entities are also entitled to transact common stock of Indian companies under the Indian laws relating to investment by foreigners. BofA Securities reserves the right to refuse to provide a copy of research on common stock of Indian companies to a person not resident in India. American Depositary Receipts (ADR) representing such common stock are not subject to these Indian law restrictions and may be transacted by investors in accordance with the applicable laws of the relevant jurisdiction. Global Depositary Receipts (GDR) and the Global Depositary Shares (GDS) of Indian companies, Indian limited liability corporations, have not been registered under the U.S. Securities Act of 1933, as amended, and may only be transacted by persons in the United States who are Qualified Institutional Buyers (QIBs) within the meaning of Rule 144A under the Securities Act. Accordingly, no copy of any research report on Indian companies' GDRs or GDSs will be made available to persons who are not QIBs.

BofA Securities India Limited (BofAS India) is regulated by the Securities and Exchange Board of India (SEBI) and provides the following services in India: Research, Equity Sales & Trading, Futures & Options, Electronic Trading, Equity Capital Markets, Debt Capital Markets and M&A. SEBI Registration Nos. Research Analyst: INH000000503, Stock Broking: INZ000217333 (Trading and Clearing Member of NSE and BSE – Capital Markets and Equity Derivatives), Merchant Banker: INM000011625, CIN U74140MH1975PLC018618. Registration granted by SEBI and certification from National Institute of Securities Markets (NISM) in no way guarantee performance of the intermediary or provide any assurance of returns to investors. BofAS India's registered office is at Ground Floor, A Wing, One BKC, G Block, Bandra Kurla Complex, Bandra (East), Mumbai 400 051, India, Tel: +91 22 6632 8000 and the contact details of its Compliance Officer (Shervin Purohit) are: Tel: (91-22) 6632 8853, Email: shervin.purohit@bofa.com. For specific grievances, if any, please contact the Grievance Officer (Amish Shah) and contact details are: Tel: (91-22) 6632 8000, Email: dg.rsch_in_complaint@bofa.com. Investment in securities market are subject to market risks. Read all the related documents carefully before investing.



Disclosures

Important Disclosures

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Individuals identified as economists do not function as research analysts under U.S. law and reports prepared by them are not research reports under applicable U.S. rules and regulations.

Macroeconomic analysis is considered investment research for purposes of distribution in the U.K. under the rules of the Financial Conduct Authority.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options,



futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Certain investment strategies and financial instruments discussed herein may only be appropriate for consideration in accounts qualified for high risk investment.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

Research Analysts

Asia FI Strategy & Economics