

## Federal Reserve Watch

## March FOMC preview: not giving up on the disinflation trend just yet

**Stay on hold, keep 3 cuts, but just barely**

At the March FOMC meeting, we expect the Fed to revise its outlook in favor of stronger growth and firmer inflation while leaving unemployment near multi-decade lows. We think it still guides markets to a cutting cycle that begins in June, but the clear risk is it defers cuts. The Fed will begin discussion about its balance sheet plans. The focus will be on when and how much to taper Treasury run-off caps.

**The statement: virtually no changes**

The Fed made wholesale changes to its statement in January and it does not need much editing. The statement can still describe growth as “solid” despite evidence of deceleration. And despite the uptick in U3-unemployment to 3.9%, it can be described as having “remained low”. We do think the statement needs to acknowledge that the pace of job creation has picked up. Otherwise, the message from the statement is that cuts will come if and when the Fed gains confidence on inflation. That has not changed.

**Press conference: less confident, not lacking confidence**

Powell is likely to say the committee is less confident about the outlook for inflation in March than it was in January considering recent inflation prints. We expect him to balance this by underscoring the confidence in the outlook expressed through the updated projections. We think the message will be that the January and February CPI reports have marginally reduced confidence and challenge the prospect of a June cut. Nonetheless, the committee thinks the broader disinflationary trend remains in place. The timing of cuts is one thing. Whether there are cuts is another.

**Projections: Faster growth, firmer inflation**

We look for the median member to project growth of 1.8% this year, with unchanged values for 2025 and 2026 at 1.8% and 1.9%, respectively. We expect headline and core PCE in 2024 will be revised hither to 2.5% and 2.6%, respectively, from 2.4% and 2.4%, previously. We look for headline and core PCE to be one-tenth higher in 2025, and for the committee to continue to project inflation reaches 2.0% by 2026. We think the Fed will maintain its prior expectation and project a stable unemployment rate through 2026.

**The dots: a median of three, but the clear risk is to fewer**

In the dot plot, we expect the median member to continue to forecast three cuts in 2024, four in 2025, a terminal of 2.9%, and no change in the median long-run dot. This may be fanciful thinking on our part, but there are several inflation reports and plenty of time between now and June to change course if needed. The clear risk is less confidence on inflation reduces the number of cuts in 2024, if not 2025.

**Balance sheet: the discussion begins**

We currently expect the tapering of Treasury caps from \$60bn per month to \$30bn per month at the May meeting and we expect balance sheet runoff to conclude at year-end. That said, the decline in ON RRP balances has slowed. Should that continue, it could push out the expected start to taper.

**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 8 to 9.**

12670859

Timestamp: 15 March 2024 04:30AM EDT

15 March 2024

Economics  
United StatesUS Economics  
BofAS

**Michael Gapen**  
US Economist  
BofAS  
+1 646 855 3270  
[michael.gapen@bofa.com](mailto:michael.gapen@bofa.com)

**Aditya Bhawe**  
US Economist  
BofAS  
+1 646 855 9929  
[aditya.bhave@bofa.com](mailto:aditya.bhave@bofa.com)

**Stephen Juneau**  
US Economist  
BofAS  
+1 202 442 7429  
[stephen.juneau@bofa.com](mailto:stephen.juneau@bofa.com)

**Shruti Mishra**  
US and Global Economist  
BofAS  
+1 646 855 1040  
[smishra44@bofa.com](mailto:smishra44@bofa.com)

**Jeseo Park**  
US Economist  
BofAS  
+1 646 855 8688  
[jeseo.park@bofa.com](mailto:jeseo.park@bofa.com)

See Team Page for List of Analysts

ON RRP- Overnight Reverse Repo  
Facility

## Still more questions than answers

Two questions have dominated sentiment recently. These are: (1) is the US economy re-accelerating?, and (2) will inflation allow the Fed to begin an easing cycle later this year as we, and they, expect?

### Growth is moderating into 1Q...

On the first question, we think we have enough information in hand to say, “no, the US economy is not re-accelerating.” February data, on net, favor moderation in growth in economy activity. Although auto sales surprised modestly to the upside, household balance sheets added \$4.8tn to household net worth in 4Q 23, and the details of the Quarterly Services Survey (QSS) were favorable, the remainder of the data points have surprised to the downside. This includes soft data – the Chicago PMI, ISM manufacturing, and ISM services reports – and the hard data, including factory orders, core durable goods orders, wholesale inventories, the trade balance, and retail sales.

Although February retail sales were stronger than our forecast, they came in below consensus expectations and brought revisions to the prior two months’ data. Ex-auto retail sales were revised down more than 0.5pp over December and January, while core control sales were marked down by more than 0.2pp. The trajectory of retail spending looks significantly softer than it did when the data for December were released. December retail sales ex-autos are 0.7pp weaker than they were in the initial release.

At an average gain of 265k over the past three months, growth in nonfarm payrolls is at its fastest pace since last June. By this metric it is hard to argue the labor market is soft. That said, growth in aggregate hours is as slow as it has been during the post-pandemic recovery and the three-month annualized change in average hourly earnings for production and nonsupervisory employees fell back to 4.0%. Finally, the unemployment rate ticked higher to 3.9%. Labor market conditions appeared to cool on the margin.

Taking into account data through February retail sales, we are currently tracking 2.4% q/q saar for 1Q US GDP (our official forecast is 2.5% q/q saar), and the average of the three Federal Reserve trackers that we follow (Atlanta Fed, New York Fed, and St. Louis Fed trackers) has been hovering near 2.0%. There are clear signs growth in activity is slowing from the 3.2% pace in the fourth quarter and even further from 4.9% in the third quarter.

### Exhibit 1: A supply-side bump: More growth, slightly more inflation, low unemployment

BofA US Economics forecast for the March Summary of Economic Projections

	2024	2025	2026	Longer Run
Change in real GDP (% 4Q/4Q)				
March SEP (forecast)	1.8	1.8	1.9	1.8
December SEP	1.4	1.8	1.9	1.8
Unemployment rate (%)				
March SEP (forecast)	4.1	4.1	4.1	4.1
December SEP	4.1	4.1	4.1	4.1
PCE inflation (% 4Q/4Q)				
March SEP (forecast)	2.5	2.2	2.0	2.0
December SEP	2.4	2.1	2.0	2.0
Core PCE inflation (% 4Q/4Q)				
March SEP (forecast)	2.6	2.3	2.0	2.0
December SEP	2.4	2.2	2.0	
Federal funds target rate (midpoint)				
March SEP (forecast)	4.6	3.9	2.9	2.5
December SEP	4.6	3.6	2.9	2.5

Source: Federal Reserve, BofA Securities

BofA GLOBAL RESEARCH

### ...but a bump in the road on inflation or a turn?

Turning to the second question, the jury is still out. The January Consumer Price Index (CPI) report caused a lot of anxiety in markets – and likely the Fed – given the strong 0.4% m/m rise in core inflation and the surprise 0.6% m/m increase in shelter inflation. January core PCE followed with a strong 0.4% m/m increase, though the y/y rate still ticked one-tenth lower to 2.8%.

In our view, the February inflation data to date has been better than the January outturn, but not by much. The good news in February CPI came through the deceleration in services inflation and the elimination of the surprisingly wide gap between OER and rents that emerged in January. It appears the gap is likely a one-off and reduces the probability that we will see OER running persistently above rents.

The bad news in the report came from still-firm super core inflation (core services less rent of shelter) and a surprise increase in core goods prices. While our baseline outlook calls for stickiness in services inflation, we would be surprised if goods price declines have ended. Hence, we are willing to look through the goods price rebound and focus on the overall deceleration in services along with the elimination of the gap between OER and rent inflation. It was not a great CPI report, but it could have been worse.

February PPI was also a mixed bag but brought some additional relief. We attribute much of the stronger-than-expected increase (0.6% m/m versus 0.3% consensus) to the 6.8% rise in gasoline prices. PPI ex-food and energy was up a more modest 0.3% m/m (a tenth above expectations). The components of PPI that flow into PCE inflation were favorable, as physician offices, hospital services, and portfolio management were all weaker in February versus January.

Factoring in February CPI and the components of PPI that feed into PCE inflation, we expect core PCE inflation to rise by 0.28% m/m in February.

On net, the February inflation picture looks a little better than it did in January, but the past two months of inflation represent a bump in the road in the pace of disinflation. Or does it represent a turn?

### What does it mean to need “more of the same” to cut?

Powell testified to Congress that the Fed needed “a little” more data and “a little more evidence” to validate its outlook for cuts this year. He said the data did not need to get better, but, instead, the Fed just needed to see “more of the same”. He had the January data in hand when he made these remarks before Congress, but not the February data. Does this mean the January inflation data was ok in the Fed’s eyes or does the inflation data have to get better?

We think the January data likely raised concerns (eg. weakened confidence) about inflation returning to 2.0% sustainably over time. The February data likely assuaged these concerns somewhat, but not by enough for committee members to build the confidence needed to definitively signal at the March meeting that the cutting cycle will start in June.

Hence, we think “more of the same” means the inflation data needs to improve for the Fed to cut in June. We have not given up on our view that PCE inflation will converge to 2.0% (likely in 2026) and believe the Fed can cut in an environment of solid growth, low unemployment, and falling inflation.

However, we are told by the Fed that the start of the cycle is dependent on the near-term data. Our view of a June start to the cutting cycle is now down to two inflation reports between now and the June FOMC. If recent data was a bump in the road, then a cut in June remains likely. If it is not, then the start will be delayed.



## The statement: virtually no changes

In looking at the FOMC statement and assessing where changes could be made, we find little reason to look for major substantive changes. As we note below, we expect participants will revise higher their outlook for growth in 2024. As a result, we think the statement can still describe growth as “solid” despite evidence of deceleration. And despite the uptick in U3-unemployment to 3.9%, the unemployment rate can be described as having “remained low”.

That said, at 3.9%, the unemployment rate is at its highest level since January 2022 and it would not be unreasonable to say “the unemployment rate has edged higher, but remains low.” In addition, with payrolls expanding by 265k on average over the past three months, it cannot be said that “job gains have moderated since early last year but remain strong.” They certainly remain strong but have not moderated. On net, we do not think the committee will alter its description of a low unemployment rate, but we think the statement needs to acknowledge that the pace of job creation has picked up (see the Appendix to this report for our anticipated language changes).

In paragraph two, we do not expect the Fed to alter its definition of the balance of risks. We doubt the committee would be willing to give up its view that “its employment and inflation goals are moving into better balance” only one meeting after its insertion and based on one month worth of poor inflation data.

We look for no changes in the remaining paragraphs and, on net, expect the message from the statement to be the same in March as it was in January. Namely, cutting will require gaining more confidence on inflation and the recent data flow have not given the Fed sufficient confidence. If anything, it likely reduced that confidence on the margin.

## Press conference: trend disinflation remains in place

At the January FOMC meeting and during the intermeeting period, Chair Powell and other FOMC members that took the opportunity to speak emphasized that the committee was not sufficiently confident enough about the inflation trajectory to start cutting rates. We expect Powell to say that the committee continues to lack sufficient confidence. Powell may very well say the committee is somewhat less confident/more cautious in March than it was in January in light of recent inflation prints.

We expect him to balance this drop in confidence by underscoring the general confidence expressed through the updated projections. In addition, Powell can repeat the language he used in his testimony to Congress that the Committee is “not far” from having that confidence it needs. It was only in January when the six-month annualized rate of core PCE inflation rate was only 2.5%. Powell could make it clear that he and the committee have not given up on the idea that inflation will sustainably fall to 2.0%. He could attribute the January and February data as more of a “bump in the road” and lean on supply side forces to keep their projections for cuts in place.

The bottom line is we think the message will be that the January and February CPI reports have marginally reduced confidence and challenge the prospect of a June cut. Nonetheless, the committee thinks the broader disinflationary trend remains in place.

## Updated forecasts: Faster growth, slower disinflation

In the updated Summary of Economic Projections, we expect revisions in the direction of faster growth and slightly firmer inflation. We expect revisions to be mainly concentrated in 2024, versus 2025 and 2026.

### Faster growth in 2024, upside risk to 2025 and 2026

For growth in economic activity, we look for the median member to project growth of 1.8% this year, with unchanged values for 2025 and 2026 at 1.8% and 1.9%, respectively. Most participants view GDP as auto-regressive, and there could be some minor upside to the forecasts for 2025 and 2026 – in the neighborhood of 2.0% – given the strength of the anticipated upward revision to 2024.

Either way, forecast revisions for growth should leave the median member thinking the economy will grow at or near its longer-run potential over the forecast horizon, solidifying the consensus view that inflation can come down without output needing to fall below potential.

### **Slightly firmer inflation**

Given the recent firmness in inflation and break in the disinflation trend, committee members are likely to submit a firmer path for PCE inflation. We expect headline and core PCE in 2024 will be revised hither to 2.5% and 2.6%, respectively, from 2.4% and 2.4%, previously. We look for headline and core PCE to be one-tenth higher in 2025, and for the committee to continue to project inflation reaches 2.0% by 2026.

### **Stable unemployment rate**

In December, the median member projected an end-2024 unemployment rate of 4.1% and for the unemployment rate to hold steady at this rate across the forecast horizon. Even though the U3-unemployment rate is only two-tenths below the 4.1% projection for year-end in the median forecast, we think the Fed can maintain its prior expectation and continue to project a stable unemployment rate through 2026.

### **Further whiffs of a supply-driven recovery**

The revisions will also give the flavor that many participants have expressed in public. A substantial upward revision to growth alongside minor revisions to inflation, unemployment, and the appropriate policy path carry the flavor of a continued supply shock. The message should be that the committee will look past the supply shock when thinking about its policy stance, unless it receives evidence via stronger inflation that demand is starting to outstrip supply, creating undesirable overheating effects.

We expect the median forecast to maintain the optimistic, supply-driven view the Fed has led with lately. But its emphasis on risk management clearly signals it needs more confidence in this view before it moves to remove policy restriction.

### **The dots: a median of three, but the clear risk is to fewer**

In the dot plot, we expect the median member to continue to forecast three cuts in 2024 under appropriate policy. Only two dots need to move higher for the median forecast to show only two cuts. This is not a high bar given our expected upward revisions to growth and inflation. We expect the median forecast for 2025 and 2026, plus the long-run dot, to remain unchanged.

We do not know for sure, but based on Fed communication and our dove-hawk placement, we think the six dots at the median forecast of 4.625% for the end of 2024 include Chair Powell; Governors Jefferson, Barr, Cook, and Kugler; and Cleveland Fed President Mester.

President Mester is a likely candidate to move her dot higher given her strong inflation-fighting reputation. Would the remaining Governors buck the Chair? We think not. Could the Chair drive a clear change in the median? Absolutely. But we do not think so in March for several reasons.

- First, there are still three more CPI prints between now and the June decision. The Fed will not want to pre-judge the data this far in advance. It makes more sense – for now – to preserve the optionality of starting the cutting cycle in June. If the inflation data continue to disappoint, there will be opportunities in the next three months to take June off the table (including at the May meeting).
- Second, while inflation has been uncomfortably elevated, the Fed can take some solace from the weakening activity data, as it lowers the upside risks to services inflation. Re-acceleration of demand would be the worst scenario for rate cut prospects. As discussed above, that seems less likely given the February data.

- Third, base effects for core PCE inflation are favorable through May, but unfavorable for six of the next seven months. If the Fed does not start cutting in June, it might not be able to justify rate cuts, at least in terms of inflation, until March 2025.
- Fourth, it was only a week ago that Chair Powell testified to Congress that it was close to starting an easing cycle and only “a little” more data is needed. Powell had the January inflation data in hand when he made these statements. He could have declared more concern on inflation but did not. This suggests to us he would prefer to see upcoming inflation and employment data before altering views.

## Balance sheet: the discussion begins

At the March meeting, the Fed will begin discussion about its balance sheet plans. We do not expect many details in the press conference. The Fed has two main items up for consideration: a near-term focus on when and by how much to taper Treasury run-off caps, and a longer-term focus will be on the preferred composition of securities holdings.

### Like rate cuts, a risk to a later tapering and longer runoff

We currently expect the tapering of Treasury caps from \$60bn per month to \$30bn per month at the May meeting and we expect balance sheet runoff to conclude at year-end. That said, the decline in ON RRP balances has slowed and there is uncertainty about what target level of ON RRP balances will tell the Fed it is time to taper. Is it a “low” level of ON RRP balances (per Dallas Fed President Logan) or closer to zero (per Board Governor Waller). We do not know. Either way, a slower decline in ON RRP balances would push out any start to taper.

For example, an alternative to our baseline under a slower ON RRP decline would be for the Fed to hold discussions in March and May, release an updated set of balance sheet principles in May, and announce tapering at the July meeting with an effective start in August.

We think the Fed would prefer to separate the taper decision from the anticipated decision in June to cut rates since it would have the opportunity to evaluate the effect of each decision in isolation.

### On the long-run composition of securities holdings

At the 2024 US Monetary Policy Forum, Federal Reserve Governor Chris Waller made news when discussing his preferences for the composition of the Fed’s balance sheet during quantitative tightening. In addition to preferring an all-Treasury portfolio, Governor Waller said it would be preferable if share of bills in total securities holdings would move back toward its historical average of 30%, versus 3.0% currently.

In our view, Governor Waller’s preference for a larger share of bills on the Fed’s balance sheet is not “new news”. The Fed has always viewed the pre-2008 mix of securities – all Treasuries, skewed towards bills – as optimal for an economy functioning normally and when policy should be neutral. Put differently a “neutral” balance sheet does not engage in credit direction (holding agency mortgage-backed securities or corporate bonds), nor does it put undue pressure on long-term interest rates (hold more bills than less). Our own views on the Fed policy already encapsulate these preferences.

The bigger question, in our mind, is whether the Fed can ever get there. After all, it has been over fifteen years since the Fed’s balance sheet has looked this way and progress toward getting there in prior episodes of quantitative tightening has been short lived and reversed in subsequent downturns.

## Appendix: Projected changes in the FOMC Statement

Below we show our projected changes to the January FOMC statement which will appear in March. Strikethrough text indicates deletions from the January statement while underlined text indicates new language that we expect to appear.

Recent indicators suggest that economic activity has been expanding at a solid pace. Job gains ~~have moderated since early last year~~ but remain strong, and the unemployment rate has remained low. Inflation has eased over the past year but remains elevated.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. The Committee judges that the risks to achieving its employment and inflation goals are moving into better balance. The economic outlook is uncertain, and the Committee remains highly attentive to inflation risks.

In support of its goals, the Committee decided to maintain the target range for the federal funds rate at 5-1/4 to 5-1/2 percent. In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent. In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities, as described in its previously announced plans. The Committee is strongly committed to returning inflation to its 2 percent objective.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will take into account a wide range of information, including readings on labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

Voting for the monetary policy action were Jerome H. Powell, Chair; John C. Williams, Vice Chair; Thomas I. Barkin; Michael S. Barr; Raphael W. Bostic; Michelle W. Bowman; Lisa D. Cook; Mary C. Daly; Philip N. Jefferson; Adriana D. Kugler; Loretta J. Mester; and Christopher J. Waller.



# 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](http://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.

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 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

---

## US Economics

### Michael Gapen

US Economist  
BofA  
+1 646 855 3270  
[michael.gapen@bofa.com](mailto:michael.gapen@bofa.com)

### Aditya Bhawe

US Economist  
BofA  
+1 646 855 9929  
[aditya.bhawe@bofa.com](mailto:aditya.bhawe@bofa.com)

### Stephen Juneau

US Economist  
BofA  
+1 202 442 7429  
[stephen.juneau@bofa.com](mailto:stephen.juneau@bofa.com)

### Shruti Mishra

US and Global Economist  
BofA  
+1 646 855 1040  
[smishra44@bofa.com](mailto:smishra44@bofa.com)

### Jeseo Park

US Economist  
BofA  
+1 646 855 8688  
[jeseo.park@bofa.com](mailto:jeseo.park@bofa.com)