

US Economic Weekly

A little stag-, and more -flation

Baking some stagflation into the pie

We have revised our forecasts to better reflect trade policy developments and the recent data flow. We have marked down 4Q/4Q growth this year from 2.3% to 1.8%. But we have also raised our inflation forecasts. We now expect the core PCE to reach 3.0% y/y in 2H '25. Faced with modest stagflation, we think the Fed will stay on hold. There is a wide range of potential outcomes for the April 2 tariff announcements. We outline a few scenarios. Risks are skewed toward weaker growth and even higher inflation.

FOMC review: plain vanilla with a drop of dovishness

The March FOMC meeting was all about stagflation risks, as expected. The statement highlighted elevated uncertainty. In the SEP, growth was marked down and inflation was revised up. The dot plot medians were unchanged. Powell's comments were mostly down the middle, though markets viewed his downplaying of UMich inflation expectations and recent goods inflation as dovish.

Personal income and outlays preview: a robust report

We expect headline and core PCE inflation to come in at 0.3% m/m for February, though there is a risk that the core rounds up to 0.4%. We estimate that nominal personal income rose by 0.4% in February due to solid job and wage growth. We forecast a 0.7% pickup in nominal spending on the month. On the goods side, both control group retail sales and auto sales increased sharply in February. We expect solid gains in services spending as well, after some softness in January.

21 March 2025 Corrected

Economics United States

Aditya Bhave US Economist BofAS +1 646 855 9929 aditya.bhave@bofa.com

Stephen Juneau US Economist BofAS +1 202 442 7429 stephen.juneau@bofa.com

Shruti Mishra US Economist BofAS +1 646 855 1040 smishra44@bofa.com

Jeseo Park US Economist BofAS +1 646 855 8688 jeseo.park@bofa.com

US Economics BofAS

See Team Page for List of Analysts

CPI: Consumer Price Index

Glossary

DOGE: Department of Government Efficiency FOMC: Federal Open Market Committee PCE: Personal Consumption Expenditures SEP: Summary of Economic Projections

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 18 to 19.

A little stag-, and more -flation

Aditya Bhave

Stephen Juneau

BofAS

BofAS

Antonio Gabriel

Shruti Mishra

BofAS

BofAS

Jeseo Park

BofAS

- We have revised our forecasts to better reflect trade policy developments and the recent data flow. We have marked down 4Q/4Q growth this year from 2.3% to 1.8%.
- But we have also raised our inflation forecasts. We now expect the core PCE to reach 3.0% y/y in 2H '25. Faced with stagflation, we think the Fed will stay on hold.
- There is a wide range of outcomes for the April 2 tariff announcements. We outline a few scenarios. Risks are skewed toward weaker growth and even higher inflation.

Growth: a little turbulence in the near term

The data flow and policy mix out of Washington point to a mild slowdown in near-term economic growth. Three key headwinds have emerged since our year-ahead publication.

- Consumer spending was very soft in January. This warrants a mark-to-market lower of 1Q spending and GDP growth, in our view. Note that the sharp rebound in control group retail sales in February suggests a lot of the weakness in January was idiosyncratic. So we haven't made major changes to our spending forecasts beyond 1Q.
- 2. Tariff announcements have been more aggressive and muddled than expected. This creates two distinct economic shocks. The tariffs themselves are a stagflationary shock. Tariffs were baked into our year-ahead forecast, although we now look for a slightly larger and certainly more front-loaded impact. This is reflected in our revisions to growth and inflation. We are also increasingly concerned that tariff-related uncertainty could freeze capex in the near term. Therefore, we have lowered our capex forecasts for 1H. We still expect a capex rebound in 2H due to tax cuts.
- 3. DOGE cuts are likely to be a drag on government spending. Our prior GDP forecast already had government spending lagging the private economy. Now we think it could run close to zero for the rest of 2025. We also account for a mild headwind to consumer spending from DOGE-related layoffs. This could extend into early 2026, given plans for a broader and deeper reduction in force across agencies. For now we assume this headwind will be modest, amounting to just a couple of tenths on spending.

Exhibit 1: Our new forecasts show an economy that hits a brief air pocket in 1H 2025 and then recovers to trend-like growth BofA economic forecasts 2025-2026

	1Q 25	2Q 25	3Q 25	4Q 25	1Q 26	2Q 26	3Q 26	4Q 26
Real GDP	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
Final sales to domestic purchasers	0.1	1.3	2.2	2.3	2.4	1.9	1.9	1.9
Private consumption	1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2
Nonres investment	1.7	1.7	3.8	4.8	4.8	2.1	1.4	1.4
Residential investment	0.5	1.0	1.0	1.5	1.5	1.5	1.5	1.5
Unemployment rate (%)	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Nonfarm Payrolls (avg m/m chg, 000s)	142	125	125	75	100	100	100	100
PCE inflation (% y/y)	2.5	2.6	2.9	2.9	2.6	2.4	2.4	2.3
Core PCE inflation (% y/y)	2.7	2.9	3.0	3.0	2.9	2.6	2.6	2.5
Federal funds target (%)	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50

Source: BofA Global Research



Accounting for these factors, we have lowered annualized GDP growth in 1H 2025 from 2.4% previously to 1.5%. Beyond that our forecasts are little changed, with only minor downward revisions to subsequent quarters (Exhibit 1 and Exhibit 2). Our new forecasts show an economy that hits a brief air pocket in 1H 2025 and then recovers to trend-like growth, but without any payback for the slowdown.

Exhibit 2: We have lowered annualized GDP growth in 1H 2025 from 2.4% previously to 1.5%

BofA old vs. new GDP forecasts (%)

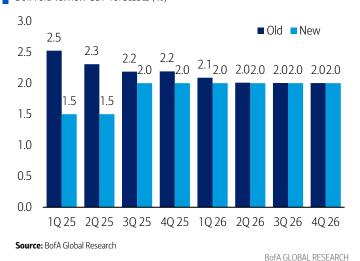
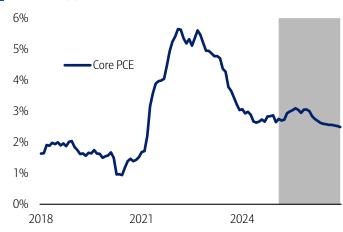


Exhibit 3: We expect core PCE inflation to rise to 3.0% y/y over the coming months in part due to tariffs

Core PCE (% y/y)



Source: BEA, Haver Analytics, BofA Global Research

BofA GLOBAL RESEARCH

Inflation: back to a 3-handle

Our new forecasts also show higher and more front-loaded inflation. We now have the core PCE peaking at 3.0% y/y in 3Q 2025, and remaining at that level in the following quarter (Exhibit 3). Part of this is just a mark-to-market based on the upside surprises in January and February, along with the upward revisions to the 4Q data.

In addition, we pull forward the impact of tariffs. Our prior forecast assumed that tariffs against China would increase by 20pp from 2Q 2025 to 1Q 2026. Instead, this increase has already been implemented in 1Q 2025. We also build in assumptions about the April 2 announcement on reciprocal tariffs. Our base case is that the April 2 measures will eventually increase the effective tariff rate by 1.5-2pp, though the initial announcement could be much larger. I.e., we think some announced measures will get negotiated away. We detail our assumptions for April 2, along with risks, below.

Fed: still no cuts on the horizon

Balancing out the downside to growth and the upside to inflation, we stick to our forecast that the Fed won't be able to cut rates any further (Exhibit 4). Initial conditions are critical here. We entered this turbulent period with above-trend growth, stocks at all-time highs, a solid labor market and above-target inflation. Therefore, the Fed has some leeway on its full employment mandate, but no margin for error on its inflation mandate. The mild slowdown that we are forecasting is unlikely to induce rate cuts.

We are also more concerned about the spike in UMich long-term inflation expectations than Chair Powell seems to be. To be sure, the stability in the New York Fed inflation expectations survey and long-end breakeven inflation is encouraging. But the size of the increase in the UMich measure is striking, from our perspective: as of this writing, it stands at a 32-year high (Exhibit 5).



Exhibit 4: We expect the Fed to leave rates unchanged this year. The market and the Fed both expect cuts

Projections for fed funds rate (%)

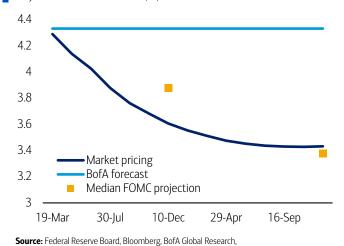
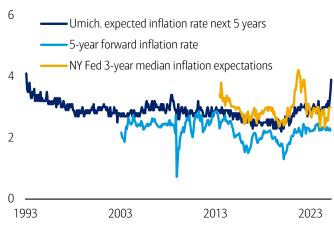


Exhibit 5: The rise in UMich inflation expectations has us more concerned than Chair Powell

Inflation expectations (%)



Source: University of Michigan, FRBNY, Haver Analytics

BofA GLOBAL RESEARCH

Risks: skewed toward even more stagflation

Policy uncertainty creates large risks to our outlook in both directions. On balance we think the risks are skewed towards weaker growth and higher inflation.

BofA GLOBAL RESEARCH

Trade: things get serious after April Fool's Day

Tariffs pose the biggest risk to our outlook. The near-term focus is on April 2, which is when the Trump Administration has said it will i) announce "reciprocal tariffs", and ii) decide whether to impose tariffs against Canada and Mexico, after two delays.

Our base case is that the April 2 announcement will be focused on two areas. First, we expect reciprocal tariffs against countries that levy a higher effective tariff on imported US goods than vice versa. Four countries move the needle on this front: India, Japan, Brazil, and Thailand. Second, we think 25% tariffs will be announced on food and auto imports from all countries except Canada and Mexico. These tariffs would be about five times as large as the country-specific reciprocal measures.

Importantly, we expect the announcements on April 2 to come with roughly a one-month delay in implementation, leaving space for negotiation. We think about a third to a half of the announced measures will not get implemented (at least, not for an extended period). Therefore, as discussed above, our base case is that the effective tariff rate will increase by 1.5-2pp (on top of the 2.7pp from the 20% China tariffs). This would bring the effective tariff rate up to around 7%, a level not seen since the 1960s (Exhibit 7). Relative to our year-ahead forecast, this amounts to a 0.5-1pp increase in the effective tariff rate.

The risks around our base case for April 2 are huge since there is very little clarity on how the Trump Administration will define "reciprocity". In a bullish scenario, reciprocal tariffs might only be implemented at the country level, and countries that have proactively negotiated with the administration, such as India, might be spared. In this case, the effective tariff rate would rise by a mere 0.3pp.

In a bearish scenario, however, tariffs could increase significantly. We estimate that i) reciprocity of tariffs and (actual or perceived) non-tariff barriers such as VAT differentials (10pp for the EU, 5pp elsewhere), ii) 25% tariffs on all auto and food imports, and Canadian energy, and iii) an additional 10pp tariff on China, could hike the effective tariff rate by more than 11pp.



Exhibit 6: Our new baseline expectations for tariffs results in a slightly higher effective tariff rate than our prior baseline

Change in the effective tariff rate under different scenarios

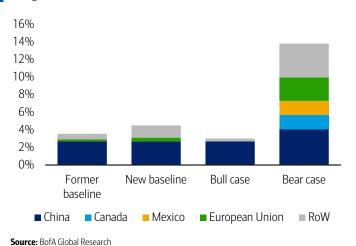


Exhibit 7: Our tariff expectations would bring the effective tariff rate up to levels not seen since the 1960s

Effective tariff rate (duties as a share of imports)



Source: USITC, BofA Global Research

BofA GLOBAL RESEARCH

Estimating the macro impact of tariffs

Goods make up nearly a third of total consumption in the US, and the import content of goods is just over 20%. Therefore, a 1pp hike in the effective tariff rate amounts to about 7bp of consumer spending. There are a few factors to consider in estimating the resulting impact on inflation. On the one hand, tariffs on imported goods could lead to price hikes by domestic firms. Services inflation could also be impacted, because of either tariffed inputs or an increase in inflation expectations. These factors could lead to an inflation shock that is more than one-to-one.

BofA GLOBAL RESEARCH

On the other hand, dollar appreciation, absorption of tariffs in margins, rerouting of supply chains and weaker demand for non-tariffed components of the consumption basket (due to either a broad economic slowdown or the increased wallet share of tariffed goods) could mean the impact of tariffs on inflation is less than one-to-one. Indeed, the 2018-19 US-China trade war had almost no impact on PCE inflation.

We see a bigger effect this time, since we are in a more inflationary environment, and the measures that have been announced (and that we expect) are larger and more broad based. Balancing these considerations, our base case is that a 1pp shock to the effective rate should raise headline PCE inflation by around 7bp. Therefore, our forecasts bake in a 30-35bp increase in inflation from the China tariffs and our expectations for April 2. We also account for a similar-sized headwind to real GDP growth.

In our bullish scenario, the macro effects of the April 2 announcements would be negligible, though the China tariffs would still be worth around 20bp of upside to inflation and downside to growth. In the bearish scenario, however, we worry about nonlinear effects for both growth and inflation. The economy could slip into recession and, if expectations become unanchored, inflation could rise to 5%. To be clear, this is a tail risk. But it illustrates how broad the range of outcomes is around the April 2 announcement.

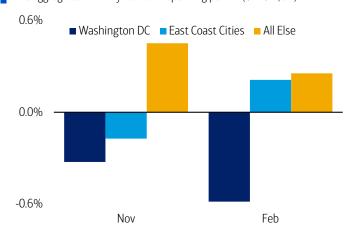
DOGE: knock-on effects pose the largest risks

We have covered the impact of DOGE cuts from a few different angles, including layoffs/spending cuts (see: Tracking DOGE), and BAC card spending (see: BofA on USA: February: tepid retail sales and a modest DOGE drag for methodology, limitations, and disclaimers related to BAC card data). Our conclusion is that the effect of DOGE actions is localized in the DC metro area so far (Exhibit 8 and Exhibit 9). This region isn't big enough to move the needle on the macro economy. For example, it makes up just 3% of the BAC card sample. And federal workers are less than 2% of total nonfarm payrolls.



The risk is that the knock-on effects from DOGE cuts could weigh on the broader labor market in the future. Groups worth keeping an eye on include federal contractors, health care workers, researchers and public school employees. Given that we are getting close to the end of the academic year, any drag on public school employment due to potential cuts in Department of Education funding might be delayed until the late summer.

Exhibit 8: M/m Feb total card spending growth was substantially weaker in the DC MSA (-0.6%) than the other east coast cities (+0.2%) BAC aggregated monthly total card spending per HH (% m/m, SA)

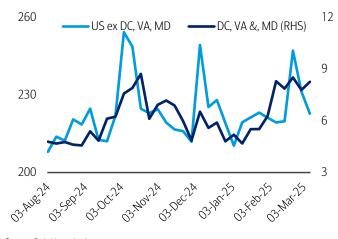


Source: BAC internal data, Note: East coast cities include Boston, New York City, Philadelphia, Baltimore. Charlotte and Atlanta

BofA GLOBAL RESEARCH

Exhibit 9: Initial jobless claims in DC, VA and MD have seen a sustained uptick in recent weeks, which has not been reflected in the rest of the country

Initial jobless claims (thous. SA)



Source: DoL, Haver Analytics

BofA GLOBAL RESEARCH

Immigration: another potential supply shock

We remain comfortable with our post-election assumption that changes in immigration policy won't be a major drag on the economy. But if deportations end up being larger than expected and immigration flows (e.g. of seasonal workers) also slow substantially, this could exacerbate risks of stagflation due to labor shortages. Investors should watch the food inflation data (which have been benign so far) to understand if these risks are materializing.

Fiscal policy: risks in both directions

Taken at face value, the budget resolution bill passed by the House could be contractionary relative to current policy. It barely pays for a 10-year extension of the Tax Cuts and Jobs Act (TCJA), and budgets for \$2tn in spending cuts, nearly half of which would come from Medicare and (more likely) Medicaid. Recipients of Medicaid are lower income, and their spending would be more sensitive, on average, to entitlement cuts.

However, we remain skeptical that the final bill will be contractionary in the near term. The Senate has yet to mark up the bill. The final numbers that the two chambers agree upon might look very different from the House's bill. Even given these numbers, there are ways to engineer a fiscal expansion in FY26. For one, spending cuts could be backloaded. For another, reducing the window for the TCJA extension would open up room for additional tax cuts. For example, a seven-year extension would free up around \$1.5tn for measures such as full expensing of capex, corporate tax cuts, raising the SALT deduction cap, etc.

Therefore, the risks around fiscal policy are two-sided. Our base case is still that capex will accelerate starting in 3Q 2025 because the final bill will allow for full expensing. But we also need to consider the interaction between the administration's various policy initiatives. If tariffs, DOGE cuts and immigration restrictions end up weighing on the economy more than we expect, the risk is that fiscal policy will be more accommodativeas an offset. So while markets are focused on downside risks to growth this year, fiscal policy could create some upside risks in 2026.



What are the key thresholds for Fed policy?

Large risks to the macro outlook mean large risks to Fed policy. We think it will be very difficult for the Fed to cut rates if core PCE inflation breaches the 3% threshold. On the flip side, an increase in the u-rate to 4.5% will probably trigger cuts, especially if payroll growth has fallen below 100k. In this scenario, recession risks would be elevated and the Fed might well want to shift quickly to an accommodative stance, cutting rates by 200bp or more. In other words, the distribution for Fed policy outcomes looks bimodal, and a return to neutral policy rates feels like a knife-edge outcome.



US GDP Tracking

1Q GDP unchanged at 1.9%

Our 1Q GDP tracking remains unchanged at 1.9% q/q saar and our 4Q GDP tracking also remained at 2.3% q/q saar since our last weekly publication. Here is a rundown of the changes to our tracking estimate.

Core control retail sales, the component that feeds into our GDP tracking came in above expectations in Feb. Jan was revised down while Dec was revised up. On net, this led to an increase in our 1Q PCE (personal consumption expenditure) and residential investment estimate.

Import prices came in higher than expected in Feb likely on the back of a rise in tariffs. This led to a small increase in our 1Q net exports tracking estimate.

Industrial production, similar to retail sales came in higher than expected. Utilities came in weaker than expected while mining came in stronger than expected. Business equipment was closer to our forecast. This led to an increase in our 1Q structures investment estimate and a decline in PCE tracking.

Housing data (starts and existing home sales) in Feb came in higher than expected leading to an increase in our 1Q residential investment tracking.

Next week, February new home sales, durable goods orders, advance goods trade, personal income & outlays and GDP 4Q (T) will impact our 1Q and 4Q GDP tracking.

Exhibit 10: 1Q GDP tracking remains unchanged at 1.9% q/q saar

BofA US GDP tracking estimate (% q/q saar)

												Net	
												exports	CIPI
Date	Data release	GDP	Final Sales	PCE	Res. Inv.	Struct	Equip	IPP	Gov.	Exports	Imports	(level)	(level)
3/13/25	Quarterly Services Survey	1.9	1.8	1.8	0.2	0.3	5.6	1.5	1.0	5.9	17.9	-1169.0	97.2
3/17/25	Retail Sales, Business Inventories	2.0	1.8	1.9	0.3	0.3	5.6	1.5	1.0	5.9	17.9	-1169.0	99.0
3/18/25	Import and Export Prices	1.9	1.8	1.9	0.3	0.3	5.6	1.5	1.0	5.5	18.6	-1177.7	99.0
3/19/25	Industrial Production	1.9	1.8	1.8	0.3	1.1	5.7	1.5	1.0	5.5	18.6	-1177.7	99.0
3/20/25	Housing Starts and Existing Home Sales	1.9	1.8	1.8	0.6	1.1	5.7	1.5	1.0	5.5	18.6	-1177.7	99.0
	GDP tracking	1.9	1.8	1.8	0.6	1.1	5.7	1.5	1.0	5.5	18.6	-1177.7	99.0
	Contribution to GDP growth (pp)			1.3	0.0	0.0	0.3	0.1	0.2			-1.8	1.9
	BofA official GDP forecast	2.5	2.3	2.6	-1.0	0.5	6.5	1.5	1.0	3.0	10.0	-1130.7	81.2

Source: BofA Global Research. Our GDP tracking estimate reflects the mechanical aggregation of incoming data that directly informs the BEA's GDP calculations. The process is distinct from our official published GDP forecast. Boldface cells indicate where data have implications for tracking estimates.

BofA GLOBAL RESEARCH



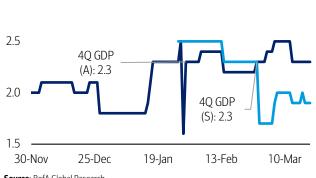


BofA GLOBAL RESEARCH

Exhibit 12: 1Q GDP tracking remains unchanged at 1.9%. Our 4Q GDP tracking also remained at 2.3% q/q saar.

US GDP tracking (% q/q saar)

-40 2024



Source: BofA Global Research



Data in the past week

This week the focus was on retail sales, FOMC rate decision

Data in the past week

Date	Time	Indicator	Period	Actual	Consensus	Previous
3/17/25	8:30	Advance Retail Sales	Feb	0.2%	0.6%	-1.2%
3/17/25	8:30	Retail Sales Less Autos	Feb	0.3%	0.3%	-0.6%
3/17/25	8:30	Retail Sales Less Autos and Gas	Feb	0.5%	0.4%	-0.8%
3/17/25	8:30	Core Control	Feb	1.0%	0.4%	-1.0%
3/17/25	8:30	Empire Manufacturing	Mar	-20.0	-1.9	5.7
3/17/25	10:00	Business Inventories	Jan	0.3%	0.3%	-0.2%
3/17/25	10:00	NAHB Housing Market Index	Mar	39	42	42
3/18/25	8:30	Building Permits	Feb P	1456k	1453k	1473k
3/18/25	8:30	Housing Starts	Feb	1501k	1385k	1350k
3/18/25	8:30	Import Price Index (mom)	Feb	0.4%	0.0%	0.4%
3/18/25	8:30	Import Price Index ex Petroleum (mom)	Feb	0.4%	0.2%	0.1%
3/18/25	9:15	Industrial Production	Feb	0.7%	0.2%	0.3%
3/18/25	9:15	Manufacturing Production	Feb	0.9%	0.3%	0.1%
3/18/25	9:15	Capacity Utilization	Feb	78.2%	77.8%	77.7%
3/19/25	14:00	FOMC Rate Decision (mid-point)	Mar 19	4.375%	4.375%	4.375%
3/19/25	16:00	Net Long-term TIC Flows	Jan	-\$45.2bn	_	\$75.0bn
3/20/25	8:30	Current Account Balance	4Q	-\$303.9bn	-\$330.0bn	-\$310.3bn
3/20/25	8:30	Philadelphia Fed Business Outlook	Jan	12.5	9.0	18.1
3/20/25	10:00	Leading Indicators	Feb	-0.3%	-0.2%	-0.2%
3/20/25	10:00	Existing Home Sales	Feb	4.26M	3.95M	4.09M

Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Data in the week ahead

Next week our focus is on personal income & outlays and GDP

Data in the week ahead

Date Time Indicator	Period	BofA Estimate	Consensus	Previous
3/24/25 9:45 S&P Global US manufacturing PMI		52	51.8	52.7
3/24/25 9:45 S&P Global US services PMI	Mar P	51.5	51.2	51.0
3/25/25 9:00 Case-Shiller HPI (yoy)	Jan	3.8%	_	3.9%
3/25/25 10:00 Consumer Confidence	Mar	95.0	94.0	98.3
3/25/25 10:00 New Home Sales	Feb	675k	680k	657k
3/25/25 All day Building Permits	Feb F	_	_	1456k
3/26/25 7:00 MBA Mortgage Applications	Mar 21	_	_	-6.2%
3/26/25 8:30 Durable Goods Orders	Feb P	-1.2%	-0.7%	3.2%
3/26/25 8:30 Durables Ex Transportation	Feb P	-0.2%	0.3%	0.0%
3/26/25 8:30 Core Capital Goods Shipments	Feb P	0.1%	_	-0.3%
3/26/25 8:30 Core Capital Goods Orders	Feb P	0.2%	_	0.8%
3/27/25 8:30 Wholesale Inventories	Feb P	_	_	0.8%
3/27/25 8:30 Advance Goods Trade Balance	Feb	-\$140.0bn	-\$134.5bn	-\$155.6b
3/27/25 8:30 GDP (qoq saar)	4Q T	2.3%	2.4%	2.3%
3/27/25 8:30 GDP Price Index (qoq saar)	4Q T	2.5%	_	2.4%
3/27/25 8:30 Core PCE (qoq saar)	4Q T	2.8%	_	2.7%
3/27/25 8:30 Personal consumption (qoq saar)	4Q T	4.2%	_	4.2%
3/27/25 10:00 Pending Home Sales	Feb	1.0%	_	-4.6%
3/28/25 8:30 PCE Core Prices (mom)	Feb	0.3%	0.3%	0.3%
3/28/25 8:30 PCE Headline Prices (mom)	Feb	0.3%	0.3%	0.3%
3/28/25 8:30 PCE Core Prices (yoy)	Feb	2.7%	2.7%	2.6%
3/28/25 8:30 PCE Headline Prices (yoy)	Feb	2.5%	2.5%	2.5%
3/28/25 8:30 Personal saving rate	Feb	4.3%	_	4.6%
3/28/25 8:30 Personal Spending	Feb	0.7%	0.6%	-0.2%
3/28/25 8:30 Personal Income	Feb	0.4%	0.4%	0.9%
3/28/25 10:00 U. of Michigan Sentiment	Mar F	57.5	_	57.9

Source: BofA Global Research, Bloomberg



Federal Reserve Speakers

Exhibit 13: Key speaking engagements and news events

Upcoming policy speakers

Date	Time	Speaker
Mar 21	8:30	Fed's Goolsbee on CNBC
Mar 21	9:05	Fed's Williams Speaks in Bahamas
Mar 24	13:45	Fed's Bostic on Bloomberg TV
Mar 24	15:10	Fed's Barr Speaks on Small Business Lending
Mar 25	8:40	Fed's Kugler Gives Speech on Economy, Entrepreneurship
Mar 25	9:05	Fed's Williams Gives Opening Remarks
Mar 26	10:00	Fed's Kashkari Hosts Fed Listens, conversation
Mar 26	13:10	Fed's Musalem Speaks on Economy, Monetary Policy
Mar 27	16:30	Fed's Barkin Gives Speech, Q&A

Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 14: Below is a summary of key quotes from Fed speakers over the past weeks

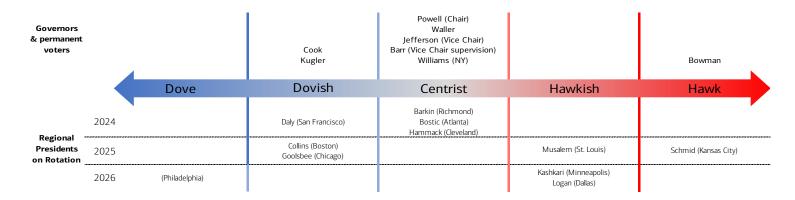
Summary of Fed speak in the previous week

Speaker	Date Quote
Powell (Chair)	19-Mar Powell reiterated that the Fed is in no hurry to adjust rates.
Powell (Chair)	07-Mar "We do not need to be in a hurry, and are well positioned to wait for greater clarity."
Harker (Philadelphia)	06-Mar Risks to US economy are rising as businesses and consumers become more cautious and inflationary pressures build.
Waller (Governor)	06-Mar Wouldn't support lowering interest rates in March, but sees room to cut two, or possibly three, times this year.
Williams (Governor) Musalem (St. Louis)	04-Mar Anticipates tariffs will contribute to inflation, but emphasized there is a lot of uncertainty about how the US economy will respond. 03-Mar "In determining how monetary policy should respond to alternative scenarios, especially when they might involve difficult employment and inflation trade-offs, it will be important that medium- to longer-term inflation expectations remain well anchored."
Goolsbee (Chicago)	28-Feb "If there's too much anticipation of these productivity booms, it can overheat the economy in the short run and it can lead to an investment overhang"
Harker (Philadelphia)	27-Feb "The policy rate remains restrictive enough to continue putting downward pressure on inflation over the longer term, as we need it to, while not negatively impacting the rest of the economy."
Hammack (Cleveland)	27-Feb "I believe that monetary policy has the luxury of being patient as we assess the path forward, and this will likely mean holding the federal funds rate steady for some time."
Schmid (Kansas)	27-Feb "While the risks to inflation appear to be to the upside, discussions with contacts in my district, as well as some recent data, suggest that elevated uncertainty might weigh on growth."
Bostic (Atlanta)	26-Feb Bostic said that the Fed should hold interest rates where they are, so that they continue to put downward pressure on inflation
Barr (Vice Chair Supervisio	n) 25-Feb "I have spoken previously about how monetary policy and financial stability are inextricably linked and how the tools we use to conduct monetary policy and support financial stability work together."
Barkin (Richmond)	25-Feb "It makes sense to stay modestly restrictive until we are more confident inflation is returning to our 2% target."

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 15: This year the regional presidents voting on the FOMC (Federal Open Market Committee) will be Collins, Goolsbee, Musalem and Schmid BofA US Economics Dove-Hawk chart



Source: FRB, BofA Global Research



Weekly spending update

Exhibit 16: Total card spending per HH was up 1.4% y/y in the week ending Mar 15

Aggregated daily card spending growth per HH by major category, Mar 08-Mar 15 (y/y % change of the 7-day moving average of spending levels)

	3/15	3/14	3/13	3/12	3/11	3/10	3/9	3/8
Total card spending	0.8%	1.3%	1.0%	1.0%	0.7%	0.6%	1.5%	2.0%
Retail ex-autos	-0.7%	-0.4%	-0.6%	-0.3%	-0.7%	-0.7%	-0.8%	-0.1%
Airlines	-6.9%	-6.3%	-6.4%	-7.2%	-7.6%	-8.0%	-7.4%	-7.1%
Lodging	-5.0%	-4.8%	-5.1%	-4.9%	-4.5%	-4.5%	-4.6%	-4.5%
Entertainment	-18.9%	-15.8%	-14.5%	-13.2%	-15.6%	-14.8%	-13.5%	-12.0%
Restaurants & bars	-0.5%	0.0%	0.1%	0.4%	0.3%	0.5%	-0.2%	0.4%
Transit	6.6%	7.4%	7.2%	7.2%	6.2%	5.9%	5.4%	5.9%
Gas	-8.3%	-8.1%	-7.9%	-7.1%	-7.2%	-7.1%	-6.8%	-5.7%
Clothing	-1.6%	-1.5%	-2.4%	-2.5%	-2.7%	-2.8%	-2.6%	-2.5%
Furniture	-3.0%	-2.0%	-2.0%	-3.2%	-3.1%	-3.2%	-3.2%	-2.0%
Department store	-1.3%	-0.8%	-1.7%	-0.9%	-1.1%	-2.0%	-2.7%	-2.2%
Home improvement	-6.8%	-6.2%	-5.0%	-3.4%	-3.6%	-3.8%	-3.8%	-2.7%
Online electronics	9.9%	10.9%	8.1%	6.5%	4.5%	4.6%	3.3%	4.7%
Grocery	0.0%	0.1%	-0.2%	0.1%	-0.4%	-0.4%	-0.1%	0.7%
General Merchandise	1.5%	1.9%	1.7%	2.1%	1.4%	1.4%	0.9%	1.7%
Total B&M retail	-2.3%	-2.0%	-2.0%	-1.6%	-1.9%	-2.0%	-2.2%	-1.4%
Total online retail	4.2%	4.5%	3.8%	3.4%	3.1%	3.3%	3.3%	3.6%
Total card debit	1.7%	2.1%	1.6%	1.6%	1.1%	1.0%	2.0%	2.4%
Total card credit	-0.5%	0.2%	0.1%	0.2%	0.0%	0.1%	0.9%	1.5%

Source: BAC internal data. Note: The 1-year % change shows the change between the current date at the head of the table column and its comparable date a year ago. Total card spending includes total BAC card activity, which captures retail sales and services that are paid with cards. Does not include ACH payments. B&M (Brick & Mortar) retail means retail purchases at the store. Online electronics and total online retail correspond to purchases in which the card was not present. These are largely online purchases but could include purchases made over the phone. Gas includes some convenience store purchases at gas stations.

BofA GLOBAL RESEARCH

See the report, <u>BofA on USA: Weekly spending update through Mar 15, 20 March 2025</u>, for methodology, limitations, and disclaimers related to BAC card data.



Core views

Growth: A little turbulence in the near term

We have revised our forecasts to better reflect trade policy developments and the
recent data flow. We have marked down 4Q/4Q growth this year from 2.3% to 1.8%.
This lowers the annualized GDP growth in 1H 2025 from 2.4% previously to 1.5%.
Beyond that our forecasts are little changed, with only minor downward revisions to
subsequent quarters. Our forecasts show an economy that hits a brief air pocket in
1H 2025 and then recovers to trend-like growth, but without any payback for the
slowdown.

Inflation: Back to a 3-handle

• Our new forecasts also show higher and more front-loaded inflation. We now have the core PCE peaking at 3.0% y/y in 3Q 2025, and remaining at that level in the following quarter. Part of this is just a mark-to-market based on the upside surprises in January and February, along with the upward revisions to the 4Q data. Policy uncertainty creates large risks to our outlook in both directions. On balance we think the risks are skewed towards weaker growth and higher inflation.

Labor market: Resilient job growth

Job growth has stabilized, but is still dominated by the catch-up sectors. Total and
involuntary unemployment has been little changed in the last few months with
voluntary unemployment continuing to outpace involuntary unemployment. The low
pace of layoffs (and claims) has been a silver lining. Meanwhile, the labor supply
tailwind from increased prime-age participation and immigration has likely peaked.
The labor market has rebalanced and further supports our view that the Fed is done
with its rate cutting cycle.

Monetary policy: Still no cuts on the horizon

Balancing out the downside to growth and the upside to inflation, we stick to our
forecast that the Fed won't be able to cut rates any further. Initial conditions are
critical here. We entered this turbulent period with above-trend growth, stocks at
all-time highs, a solid labor market and above-target inflation. Therefore, the Fed
has some leeway on its full employment mandate, but no margin for error on its
inflation mandate. The mild slowdown that we are forecasting is unlikely to induce
rate cuts.



Economic forecast summary

Exhibit 17: We forecast stable growth, slightly elevated inflation and a fed terminal rate of 4.25-4.50% BofA US economic outlook

	1Q 24	2Q 24	3Q 24	4Q 24	1Q 25	2Q 25	3Q 25	4Q 25	1Q 26	2Q 26	3Q 26	4Q 26	2024	2025	2026
Real Economic Activity, % SAAR															
Real GDP	1.6	3.0	3.1	2.3	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.8	2.0	2.0
% Change, Year Ago	2.9	3.0	2.7	2.5	2.5	2.1	1.8	1.8	1.9	2.0	2.0	2.0			
Final Sales	2.1	2.0	3.3	3.2	0.1	1.3	2.2	2.3	2.4	1.9	1.9	1.9	2.7	1.8	2.1
Domestic Demand	2.8	2.9	3.7	3.0	1.5	1.7	2.1	2.2	2.3	1.9	1.9	1.9	3.0	2.3	2.1
Consumer Spending	1.9	2.8	3.7	4.2	1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.8	2.6	2.2
Residential Investment	13.7	-2.8	-4.3	5.4	0.5	1.0	1.0	1.5	1.5	1.5	1.5	1.5	4.2	0.8	1.4
Nonresidential Investment	4.5	3.9	4.0	-3.2	1.7	1.7	3.8	4.8	4.8	2.1	1.4	1.4	3.6	1.6	3.3
Structures	6.2	0.2	-5.0	1.1	1.5	1.5	4.0	5.0	5.0	1.5	1.0	1.0	3.4	1.1	3.3
Equipment	0.3	9.9	10.8	-9.0	2.5	2.5	5.0	6.0	6.0	1.8	1.5	1.5	3.3	2.2	4.0
Intellectual Property	7.5	0.7	3.1	0.0	1.0	1.0	2.5	3.5	3.5	2.5	1.5	1.5	3.9	1.4	2.7
Government	1.8	3.0	5.1	2.9	0.6	0.4	0.0	0.0	0.5	0.4	0.4	0.4	3.4	1.6	0.3
Exports	1.9	1.0	9.6	-0.5	5.0	2.0	1.5	1.0	1.0	1.0	2.0	2.0	3.2	3.0	1.3
Imports	6.1	7.6	10.7	-1.2	14.2	5.0	0.5	0.5	0.5	1.0	1.0	1.0	5.4	6.0	0.9
Net Exports (Bil 12\$)	-977	-1036	-1069	-1061	-1154	-1187	-1181	-1179	-1177	-1179	-1175	-1170	-1036	-1175	-1176
Contribution to growth (ppts)	-0.6	-0.9	-0.4	0.1	-1.4	-0.5	0.1	0.0	0.0	0.0	0.1	0.1	-0.4	-0.5	0.0
Inventory Accumulation (Bil 12\$)	17.7	71.7	57.9	10.2	90.2	104.2	93.2	76.2	53.7	57.7	60.7	63.7	39.4	91.0	59.0
Contribution to growth (ppts)	-0.5	1.1	-0.2	-0.8	1.4	0.2	-0.2	-0.3	-0.4	0.1	0.0	0.0	0.0	0.2	-0.1
Nominal GDP (Bil \$, SAAR)	28624	29017	29375	29720	30062	30401	30748	31090	31432	31787	32143	32493	29184	30575	31964
% SAAR	4.7	5.6	5.1	4.8	4.7	4.6	4.6	4.5	4.5	4.6	4.6	4.4	5.3	4.8	4.5
Key Indicators															
Fed Funds Rate (midpoint, % EOP)	5.375	5.375	4.875	4.375	4.375	4.375	4.375	4.375	4.375	4.375	4.375	4.375	4.375	4.375	4.375
Industrial Production (% SAAR)	-1.8	2.5	-0.5	-1.0	6.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5	-0.3	2.0	1.3
Capacity Utilization (%)	77.7	78.0	77.5	77.0	78.0	78.5	78.5	78.5	79.0	79.0	79.0	79.5	77.6	78.4	79.1
Nonfarm Payrolls (Avg mom ch, 000s)	196	133	133	209	142	125	125	75	100	100	100	100	168	117	100
Civilian Unemployment Rate (%)	3.8	4.0	4.2	4.2	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.2	4.2
Civilian Participation Rate (%)	62.6	62.6	62.7	62.5	62.4	62.4	62.3	62.3	62.2	62.2	62.2	62.2	62.6	62.4	62.2
Housing Starts (Thous. SAAR)	1405	1340	1330	1390	1445	1505	1525	1530	1525	1550	1560	1580	1365	1500	1555
Current Account (% of GDP)													-3.7	-3.9	-3.7
US Budget Balance (\$bn, Fiscal Year)													-1832	-1950	-2250
Inflation															
GDP Price Index (% SAAR)	3.0	2.5	1.9	2.4	3.1	3.0	2.6	2.5	2.4	2.5	2.5	2.4	2.4	2.7	2.5
% Change, Year Ago	2.4	2.6	2.2	2.5	2.5	2.6	2.8	2.8	2.6	2.5	2.5	2.5			
PCE Chain Prices (% SAAR)	3.4	2.5	1.5	2.4	3.4	3.2	2.5	2.3	2.3	2.5	2.4	2.2	2.5	2.7	2.4
% Change, Year Ago	2.7	2.6	2.3	2.5	2.5	2.6	2.9	2.9	2.6	2.4	2.4	2.3			
Core PCE Chain Prices (% SAAR)	3.7	2.8	2.2	2.7	3.1	3.5	2.9	2.6	2.5	2.6	2.6	2.3	2.8	2.9	2.7
% Change, Year Ago	3.0	2.7	2.7	2.8	2.7	2.9	3.0	3.0	2.9	2.6	2.6	2.5			
CPI, Consumer Prices (% SAAR)	3.7	2.8	1.4	3.0	4.1	2.8	2.6	2.1	2.3	2.5	2.1	2.2	3.0	2.9	2.3
% Change, Year Ago	3.2	3.2	2.7	2.7	2.8	2.8	3.1	2.9	2.5	2.4	2.2	2.2			
0 1															2.0
CPI ex Food & Energy (% SAAR)	4.2	3.1	2.4	3.4	3.8	3.6	3.2	2.8	2.5	2.7	2.8	2.8	3.4	3.3	2.8

Source: BofA Global Research



Rates and dollar forecast

Table 1: We do not foresee further Fed rate cuts

Rates and dollar forecast

	Spot	25-Mar	25-Jun	25-Sep	25-Dec
Interest rates					
Fed Funds	4.33	4.25-4.50	4.25-4.50	4.25-4.50	4.25-4.50
Fed Effective Rate	4.33	4.38	4.38	4.38	4.38
2-Year T-Note	3.96	4.50	4.50	4.50	4.50
5-Year T-Note	4.01	4.65	4.65	4.65	4.65
10-Year T-Note	4.24	4.75	4.75	4.75	4.75
30-Year T-Bond	4.56	5.00	5.00	5.05	5.05
Dollar					
EUR-USD	1.09	1.08	1.10	1.12	1.15
USD-JPY	149	152	156	161	165
USD-CAD	1.43	1.46	1.44	1.42	1.40
AUD-USD	0.63	0.62	0.63	0.65	0.68
NZD-USD	0.58	0.55	0.56	0.57	0.60
GBP-USD	1.30	1.30	1.34	1.38	1.44
USD-CHF	0.88	0.87	0.87	0.88	0.87
USD-SEK	10.13	10.19	9.73	9.46	9.04
USD-NOK	10.55	10.93	10.64	10.18	9.57
USD-CNY	7.25	7.50	7.60	7.50	7.40
USD-MXN	20.14	20.00	20.00	20.25	20.50

Source: BofA Global Research

BofA GLOBAL RESEARCH

Rolling calendar of business indicators

Next week the focus is on personal income & outlays and GDP

Key economic data over the next three weeks

Monday	Tuesday	Wednesday	Thursday	Friday
Mar 24	Mar 25	Mar 26	Mar 27	Mar 28
9:45 am: S&P Global US Manufacturing and Services PMI – Mar (P)	9:00 am: S&P CoreLogic CS HPI – Jan 10:00 am: New Home Sales – Feb 10:00 am: Conference Board Confidence – Mar	7:00 am: MBA Mortgage Applications – week ending 03/21/2025 8:30 am: Durable Goods Orders – Feb	8:30 am: GDP - 4Q (T) 8:30 am: Advance Goods Trade Balance – Feb 8:30 am: Initial Jobless Claims – week ending 03/22/2025 10:00 am: Pending Home Sales - Feb	8:30 am: Personal Income & Outlays - Feb 10:00 am: U of Mich Sentiment– Mar (F)
Mar 31	Apr 1	Apr 2	Apr 3	Apr 4
9:45 am: Chicago PMI – Mar	9:45 am: S&P Global US Manufacturing PMI – Mar F 10:00 am: ISM manufacturing – Mar 10:00 am: Construction Spending – Feb 10:00 am: JOLTS – Feb All Day: Vehicle Sales – Mar	7:00 am: MBA Mortgage Applications – week ending 03/28/2025 8:15 am: ADP Employment – Mar 10:00 am: Factory Orders – Feb	8:30 am: Trade Balance – Feb 8:30 am: Initial Jobless Claims – week ending 03/29/2025 9:45 am: S&P Global US Services PMI – Mar F 10:00 am: ISM services– Mar	8:30 am: Employment Report – Mar
Apr 7	Apr 8	Apr 9	Apr 10	Apr 11
	6:00 am: NFIB Small Bus. Optimism – Mar	1 •	8:30 am: Consumer Price Index – Mar 8:30 am: Initial Jobless Claims – week ending 03/05/2025 2:00 pm: Monthly Budget Statement - Mar	

^{*}Projections- subject to revision as additional data become available. P - preliminary reading, S - second reading, T - third reading, F - final reading

Source: Bloomberg



CPI and PCE Forecast tables

Exhibit 18: We expect inflation to remain slightly elevated over the course of our forecast horizon CPI monthly forecast table

		Non-s	ally Adjust	ed		Seasonally Adjusted										
	Head	dline CPI			nergy				He	adline CPI				(Core CPI	
	Level	m/m	y/y	Level	m/m	y/y	Level	m/m	y/y	q/q saar	y/y (quarterly)	Level	m/m	y/y	q/q saar	y/y (quarterly)
2024: Jan	308.42	0.54	3.1	270.42	0.39	-4.6	309.79	0.34	3.1			314.39	0.37	3.9		
2024: Feb	310.33	0.62	3.2	276.33	2.19	-1.9	311.02	0.40	3.2			315.56	0.37	3.8		
2024: Mar	312.33	0.65	3.5	285.00	3.14	2.1	312.11	0.35	3.5	3.7	3.2	316.76	0.38	3.8	4.2	3.8
2024: Apr	313.55	0.39	3.4	290.76	2.02	2.6	313.02	0.29	3.4			317.60	0.26	3.6		
2024: May	314.07	0.17	3.3	290.14	-0.21	3.7	313.14	0.04	3.2			318.05	0.14	3.4		
2024: Jun	314.18	0.03	3.0	286.68	-1.19	1.0	313.13	0.00	3.0	2.8	3.2	318.34	0.09	3.3	3.1	3.4
2024: Jul	314.54	0.12	2.9	287.87	0.42	1.1	313.57	0.14	2.9			318.93	0.19	3.2		
2024: Aug	314.80	0.08	2.5	282.61	-1.83	-4.0	314.13	0.18	2.6			319.84	0.28	3.3		
2024: Sep	315.30	0.16	2.4	275.74	-2.43	-6.8	314.85	0.23	2.4	1.4	2.7	320.84	0.31	3.3	2.4	3.3
2024: Oct	315.66	0.12	2.6	272.81	-1.06	-4.9	315.56	0.23	2.6			321.69	0.27	3.3		
2024: Nov	315.49	-0.05	2.7	268.21	-1.68	-3.2	316.45	0.28	2.7			322.62	0.29	3.3		
2024: Dec	315.61	0.04	2.9	267.96	-0.09	-0.5	317.60	0.36	2.9	3.0	2.7	323.30	0.21	3.2	3.4	3.3
2025: Jan	317.67	0.65	3.0	273.05	1.90	1.0	319.09	0.47	3.0			324.74	0.45	3.3		
2025: Feb	319.08	0.44	2.8	275.87	1.03	-0.2	319.78	0.22	2.8			325.48	0.23	3.1		
2025: Mar	320.53	0.45	2.6	277.63	0.64	-2.6	320.31	0.17	2.6	4.1	2.8	326.45	0.30	3.1	3.8	3.2
2025: Apr	321.66	0.35	2.6	279.67	0.74	-3.8	321.06	0.23	2.6			327.42	0.30	3.1		
2025: May	322.73	0.33	2.8	280.89	0.44	-3.2	321.72	0.21	2.7			328.41	0.30	3.3		
2025: Jun	324.26	0.48	3.2	287.78	2.45	0.4	323.08	0.42	3.2	2.8	2.8	329.39	0.30	3.5	3.6	3.3
2025: Jul	324.59	0.10	3.2	284.52	-1.13	-1.2	323.36	0.09	3.1			330.21	0.25	3.5		
2025: Aug	325.14	0.17	3.3	283.10	-0.50	0.2	324.18	0.25	3.2			331.02	0.25	3.5		
2025: Sep	325.13	0.00	3.1	276.45	-2.35	0.3	324.63	0.14	3.1	2.6	3.1	331.77	0.23	3.4	3.2	3.5
2025: Oct	325.14	0.00	3.0	271.31	-1.86	-0.6	325.03	0.12	3.0			332.51	0.23	3.4		
2025: Nov	324.65	-0.15	2.9	266.32	-1.84	-0.7	325.65	0.19	2.9			333.26	0.23	3.3		
2025: Dec	324.56	-0.03	2.8	263.95	-0.89	-1.5	326.64	0.30	2.8	2.1	2.9	334.01	0.23	3.3	2.8	3.3
2026: Jan	325.73	0.36	2.5	265.12	0.44	-2.9	327.13	0.15	2.5			334.65	0.19	3.1		
2026: Feb	326.79	0.33	2.4	264.83	-0.11	-4.0	327.47	0.10	2.4			335.29	0.19	3.0		
2026: Mar	328.45	0.51	2.5	272.27	2.81	-1.9	328.18	0.22	2.5	2.3	2.5	336.00	0.21	2.9	2.5	3.0
2026: Apr	329.54	0.33	2.4	276.29	1.48	-1.2	328.90	0.22	2.4			336.78	0.23	2.9		
2026: May	330.37	0.25	2.4	277.29	0.36	-1.3	329.35	0.13	2.4			337.57	0.23	2.8		
2026: Jun	331.74	0.41	2.3	284.11	2.46	-1.3	330.53	0.36	2.3	2.5	2.4	338.42	0.25	2.7	2.7	2.8
2026: Jul	331.93	0.06	2.3	281.03	-1.08	-1.2	330.71	0.05	2.3			339.17	0.22	2.7		
2026: Aug	332.37	0.13	2.2	279.79	-0.44	-1.2	331.43	0.22	2.2			339.92	0.22	2.7		
2026: Sep	332.40	0.01	2.2	273.22	-2.35	-1.2	331.86	0.13	2.2	2.1	2.2	340.70	0.23	2.7	2.8	2.7
2026: Oct	332.43	0.01	2.2	268.24	-1.82	-1.1	332.28	0.13	2.2			341.51	0.24	2.7		
2026: Nov	331.97	-0.14	2.3	263.79	-1.66	-1.0	332.97	0.21	2.2			342.32	0.24	2.7		
2026: Dec	331.93	-0.01	2.3	262.00	-0.68	-0.7	334.05	0.32	2.3	2.2	2.2	343.13	0.24	2.7	2.8	2.7

Source: Bureau of Labor Statistics, BofA Global Research



Exhibit 19: We expect inflation to remain slightly elevated over the course of our forecast horizon PCE inflation monthly forecast table (Seasonally adjusted)

Product Prod				%y/y				% m/m	
2022. Jan 6.3% 5.4% 6.9% 4.9% 0.49% 0.48% 0.92% 0.22% 0.22% 0.22% 1.22%		Headline	Core		Core services	Headline	Core		Core services
2022 Feb 66% 56% 77% 49% 063% 045% 0.57% 0.41% 052% 052% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.25% 0.26% 0.31% 0.34% 0.10% 0.43% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 0.2022.Jun 7.2% 5.3% 5.7% 5.0% 5.0% 0.61% 0.35% 0.25% 0.29% 0.2022.Dec 5.5% 5.0% 5.2% 5.6% 0.15% 0.36% 0.01% 0.29% 0.29% 0.29% 0.2023.Jun 5.5% 4.9% 2.7% 5.8% 0.35% 0.35% 0.25% 0.01% 0.24% 0.2023.Mar 4.4% 4.9% 2.5% 5.8% 0.33% 0.35% 0.29% 0.01% 0.22% 0.2033.Jun 5.5% 4.9% 2.5% 5.6% 0.13% 0.29% 0.20% 0.22% 0.2033.Jun 3.3% 4.4% 1.7% 5.5% 5.6% 0.13% 0.29% 0.20% 0.22% 0.2033.Jun 3.3% 4.4% 1.7% 5.5% 5.6% 0.13% 0.29% 0.20% 0.29% 0.2033.Jun 3.3% 4.4% 1.7% 5.5% 5.5% 0.14% 0.29% 0.29% 0.20% 0.233.Jun 3.3% 4.4% 1.7% 5.5% 5.5% 0.14% 0.14% 0.29% 0.29% 0.20% 0.233.Jun 3.3% 4.4% 1.7% 5.5% 0.25% 0.25% 0.25% 0.25% 0.20% 0.233.Jun 3.3% 4.4% 1.7% 5.5% 0.25%	2022: Jan	6.3%	5.4%	6.9%	4.9%	0.49%	0.48%	0.92%	
2022-Apr 6,7% 5,3% 6,4% 5,0% 0,31% 0,34% 0,10% 0,43% 0,29% 0	2022: Feb	6.6%	5.6%	7.7%	4.9%	0.63%	0.45%	0.57%	0.41%
2022 May 6.8% 5.2% 5.7% 5.0% 0.61% 0.36% 0.29% 0.39% 2022 Jul 6.8% 5.1% 5.5% 5.0% 0.02% 0.22% 0.09% 0.28% 2022 Jul 6.8% 5.1% 5.6% 5.3% 0.29% 0.29% 0.29% 0.29% 2022 Loug 6.6% 5.4% 5.6% 5.3% 0.29% 0.24% 0.09% 0.29% 2022 Loug 6.5% 5.5% 5.8% 5.6% 0.32% 0.44% 0.29% 0.49% 2022 Loug 6.6% 5.2% 3.9% 5.7% 0.26% 0.30% 0.19% 0.49% 2022 Loug 5.5% 5.0% 3.2% 5.6% 0.15% 0.30% 0.01% 0.49% 2022 Loug 5.5% 5.0% 3.2% 5.8% 0.51% 0.30% 0.01% 0.49% 2023 Loug 2.8% 5.8% 0.53% 0.33% 0.33% 0.04% 0.04% 0.04% 0.04% <td>2022: Mar</td> <td>7.0%</td> <td>5.6%</td> <td>7.5%</td> <td></td> <td>0.88%</td> <td>0.38%</td> <td>-0.02%</td> <td>0.52%</td>	2022: Mar	7.0%	5.6%	7.5%		0.88%	0.38%	-0.02%	0.52%
2022 Jun	2022: Apr	6.7%	5.3%	6.4%	5.0%	0.31%	0.34%	0.10%	0.43%
2022. Jul 6.8% 5.1% 5.5% 5.0% 0.03% 0.23% 0.09% 0.98% 0.98% 0.29% 5.9% 0.53% 0.09% 0.00% 0.09% 0.09% 0.00% 0.09% 0.09% 0.00% 0.09% 0.00% 0.09% 0.00% 0.09% 0.00% 0	2022: May	6.8%	5.2%			0.61%	0.36%	0.29%	0.39%
2022 Aug 66% 54% 56% 58% 56% 53% 029% 0.59% 0.44% 0.29% 0.49% 0.2022 Nov 6.5% 5.5% 4.7% 5.5% 5.7% 0.44% 0.34% 0.30% 0.19% 0.48% 0.2022 Nov 6.5% 5.5% 5.0% 3.2% 5.6% 0.115% 0.36% 0.01% 0.49% 0.49% 0.2023 Nov 6.5% 5.5% 5.0% 2.2% 5.5% 5.0% 0.59% 0.59% 0.00% 0.01% 0.49% 0.2023 Nov 6.5% 4.9% 2.3% 5.8% 0.51% 0.47% 0.42% 0.49% 0.2033 Nor 4.4% 4.8% 2.5% 5.6% 0.13% 0.39% 0.29% 0.20% 0.32% 0.2033 Nor 4.4% 4.8% 2.5% 5.6% 0.13% 0.29% 0.29% 0.20% 0.32% 0.2033 Nor 4.4% 4.8% 2.5% 5.6% 0.13% 0.29% 0.29% 0.20% 0.32% 0.2033 Nor 4.4% 4.8% 2.5% 5.6% 0.13% 0.29% 0.29% 0.20% 0.30% 0.0033 Nor 0.0033 Nor 0.10% 0.29% 0.2033 Nor 0.2033 Nor 0.2033 Nor 0.2033 Nor 0.25% 0.25% 0.26% 0.25% 0.20% 0.11% 0.43% 0.0033 Nor 0.0033 Nor 0.0033 Nor 0.003	2022: Jun	7.2%	5.3%	5.7%		0.94%	0.59%	0.63%	0.57%
2022 Sep 6,7% 5,5% 5,5% 5,5% 5,6% 5,8% 5,6% 0,22% 0,44% 0,29% 0,29% 0,49% 2022 Nov 6,0% 5,5% 5,5% 3,2% 5,7% 0,28% 0,28% 0,30% 0,19% 0,49% 2022 Nov 6,0% 5,2% 3,2% 5,6% 5,6% 0,15% 0,28% 0,30% 0,19% 0,49% 0,20% 0,	2022: Jul	6.8%	5.1%	5.5%	5.0%	0.03%	0.23%	0.09%	0.28%
2022- Not 6.5% 5.5% 4.7% 5.7% 0.44% 0.34% -0.09% 0.49% 0.2022- Not 6.0% 5.2% 5.0% 3.9% 5.7% 0.28% 0.30% 0.30% 0.19% 0.48% 0.2022- Dec 5.5% 5.0% 3.2% 5.6% 0.15% 0.30% 0.30% 0.19% 0.48% 0.2023- Dec 5.5% 4.9% 2.7% 5.8% 0.51% 0.50% 0.37% 0.18% 0.44% 0.2033- Jan 5.5% 4.9% 2.3% 5.8% 5.8% 0.51% 0.33% 0.29% 0.20% 0.32% 0.2033- Jan 4.4% 4.8% 2.5% 5.6% 5.6% 0.13% 0.29% 0.20% 0.32% 0.2033- Jan 4.4% 4.8% 2.5% 5.6% 5.6% 0.13% 0.29% 0.20% 0.32% 0.2033- Jan 4.4% 4.8% 2.5% 5.6% 5.6% 0.13% 0.29% 0.20% 0.32% 0.2033- Jan 4.5% 4.8% 2.5% 5.6% 5.6% 0.13% 0.29% 0.20% 0.32% 0.2033- Jan 4.4% 4.8% 1.2% 5.5% 5.6% 0.13% 0.29% 0.20% 0.32% 0.2033- Jan 4.4% 4.4% 1.7% 5.3% 0.25% 0.14% 0.29% 0.26% 0.35% 0.11% 0.43% 0.2033- Jan 4.4% 4.3% 1.2% 5.4% 0.49% 0.25% 0.26% 0.15% 0.46% 0.43% 0.30% 0.2033- Jan 4.4% 4.3% 1.2% 5.4% 0.49% 0.2033- Jan 4.4% 4.3% 1.2% 5.4% 0.49% 0.30% 0.10% 0.00% 0.16% 0.03% 0.13% 0.2033- Jan 4.4% 3.3% 0.6% 4.9% 0.30% 0.00% 0.10% 0.00% 0.16% 0.00% 0.16% 0.2033- Jan 4.4% 0.2033- Jan 4.4% 0.29% 0.26% 0.35% 0.00% 0.00% 0.16% 0.33% 0.00% 0.00% 0.10% 0.00% 0.16% 0.2033- Jan 4.4% 0.	2022: Aug	6.6%	5.4%	5.6%	5.3%	0.29%	0.58%	0.53%	0.59%
2022: Nov 6.0% 5.2% 3.9% 5.7% 0.28% 0.30% 0.19% 0.48% 0.022: Dec 5.5% 5.0% 3.2% 5.6% 0.15% 0.36% 0.01% 0.49% 0.49% 0.2023: Jan 5.5% 4.9% 2.3% 5.6% 0.51% 0.37% 0.47% 0.42% 0.49% 0.023: Feb 5.2% 4.9% 2.3% 5.8% 0.33% 0.37% 0.18% 0.44% 0.42% 0.203: Mar 4.4% 4.8% 2.5% 5.6% 5.6% 0.13% 0.37% 0.118% 0.44% 0.203: Mar 4.4% 4.8% 2.5% 5.6% 5.6% 0.35% 0.35% 0.11% 0.43% 0.32% 0.02% 0.11% 0.43% 0.02% 0.02% 0.00% 0.32% 0.00% 0.35% 0.00% 0.01% 0.49% 0.028% 0.00%	2022: Sep	6.7%	5.6%	5.8%	5.6%	0.32%	0.44%	0.29%	0.49%
2022-Dec 5-59% 5-0% 3.2% 5-69% 0.15% 0.369% 0.01% 0.49% 0.023; Jan 5-59% 4.99% 2.7% 5.88% 0.51% 0.47% 0.42% 0.49% 0.023; Jan 5-59% 4.99% 2.3% 5.88% 0.51% 0.37% 0.18% 0.44% 0.023. Har 4.9% 4.89% 2.59% 5.69% 0.13% 0.29% 0.20% 0.32% 0.23% 0.33% 0.18% 0.29% 0.20% 0.32% 0.23% 0.32% 0.49% 0.25% 0.25% 0.26% 0.35% 0.11% 0.43% 0.223; Jan 4.49% 4.09% 4.7% 2.59% 5.69% 0.14% 0.25% 0.25% 0.26% 0.28% 0.30% 0.203; Jun 3.39% 4.49% 1.2% 5.49% 0.25% 0.25% 0.26% 0.28% 0.30% 0.30% 0.203; Jun 3.39% 4.49% 1.2% 5.49% 0.25% 0.26% 0.14% 0.29% 0.28% 0.30% 0.30% 0.203; Jun 3.39% 4.49% 1.2% 5.49% 0.14% 0.29% 0.14% 0.14% 0.33% 0.33% 0.33% 0.33% 0.33% 0.30% 0.00% 0.10% 0.08% 0.16% 0.33% 0.203; Jun 3.39% 0.49% 1.2% 5.49% 0.25% 0.26% 0.14% 0.33% 0.33% 0.33% 0.203; Jun 3.39% 0.204; Jun 2.29% 0.29	2022: Oct	6.5%	5.5%	4.7%		0.44%	0.34%	-0.09%	0.49%
2023; Jan 55% 4.9% 2.7% 5.8% 0.51% 0.47% 0.42% 0.49% 0.203; Feb 5.2% 4.9% 2.3% 5.8% 0.33% 0.37% 0.18% 0.44% 0.23% 0.203. Mar 4.4% 4.8% 2.5% 5.5% 5.5% 0.33% 0.25% 0.20% 0.20% 0.23% 0.20%	2022: Nov	6.0%	5.2%	3.9%	5.7%	0.28%	0.30%	-0.19%	0.48%
2023; Feb 52% 4,9% 23% 5,8% 0,33% 0,37% 0,18% 0,44% 0,44% 0,02% 0,20% 3,3% 0,37% 0,18% 0,29% 0,20% 0,32% 0,20% 0,32% 0,20% 0,32% 0,35% 0,11% 0,43% 0,23% 0,35% 0,11% 0,43% 0,203; May 4,0% 4,7% 2,5% 5,5% 5,5% 0,14% 0,29% 0,26% 0,30% 0,30% 0,23% 0,25% 0,11% 0,43% 0,33% 0,25% 0,11% 0,43% 0,33% 0,25% 0,11% 0,43% 0,33% 0,25% 0,15% 0,45% 0,15% 0,40% 0,33% 0,25% 0,16% 0,26% 0,15% 0,40% 0,33% 0,25% 0,26% 0,15% 0,45% 0,33% 0,25% 0,25% 0,16% 0,43% 0,33% 0,203; May 3,4% 3,8% 0,6% 4,9% 0,30% 0,10% 0,00% 0,10% 0,00% 0,16% 0,43% 0,23% 0,25% 0,25% 0,43% 0,25% 0,25% 0,43% 0,25% 0,25% 0,43% 0,25% 0,	2022: Dec	5.5%	5.0%	3.2%		0.15%	0.36%	0.01%	0.49%
2023: Mar	2023: Jan	5.5%	4.9%	2.7%	5.8%	0.51%	0.47%	0.42%	0.49%
2023: Apr	2023: Feb	5.2%	4.9%	2.3%	5.8%	0.33%	0.37%	0.18%	0.44%
2023; Jun 3,3% 4,4% 1,7% 5,5% 5,5% 0,14% 0,29% 0,28% 0,30% 0,203; Jun 3,3% 4,4% 1,7% 5,53% 0,25% 0,26% 0,10% 0,40% 0,43% 0,33% 0,203; Jun 3,4% 4,3% 1,2% 5,4% 0,14% 0,14% 0,14% 0,43% 0,33% 0,203; Jun 3,4% 3,8% 0,6% 4,9% 0,30% 0,10% 0,00% 0,10% 0,08% 0,16% 0,16% 0,223; Jun 3,4% 3,7% 0,2% 4,9% 0,35% 0,32% 0,02% 0,02% 0,43% 0,223; Jun 3,4% 3,4% 0,4% 4,5% 0,03% 0,13% 0,04% 0,17% 0,023; Jun 2,7% 3,2% 0,2% 4,2% 0,00% 0,09% 0,34% 0,26% 0,26% 0,03% 0,13% 0,04% 0,17% 0,023; Jun 2,6% 3,1% 0,0% 4,1% 0,15% 0,18% 0,00% 0,09% 0,34% 0,24% 0,224; Jan 2,6% 3,1% 0,05% 4,3% 0,42% 0,50% 0,00% 0,09% 0,24% 0,22% 0,224; Jan 2,6% 3,1% 0,05% 4,3% 0,42% 0,50% 0,05% 0,05% 0,68% 0,224; Jan 2,6% 3,1% 0,5% 4,1% 0,31% 0,24% 0,29% 0,22% 0,224; Jan 2,6% 3,0% 0,5% 4,1% 0,31% 0,04% 0,17% 0,05% 0,68% 0,00%	2023: Mar	4.4%	4.8%	2.5%	5.6%	0.13%	0.29%	0.20%	0.32%
2023; Jun	2023: Apr	4.5%	4.8%				0.35%		0.43%
2023. Jul 3.4% 43% 1.2% 5.4% 0.14% 0.14% 0.14% 0.43% 0.33% 0.33% 0.203. Aug 3.4% 3.8% 0.6% 4.9% 0.30% 0.10% 0.00% 0.00% 0.00% 0.00% 0.02% 0.43% 0.203. Sep 3.4% 3.7% 0.2% 4.9% 0.35% 0.35% 0.32% 0.02% 0.02% 0.43% 0.223. Nov 2.7% 3.2% 0.2% 4.3% 0.00% 0.09% 0.34% 0.24% 0.24% 0.223. Nov 2.7% 3.0% 0.0% 4.1% 0.00% 0.09% 0.09% 0.34% 0.24% 0.24% 0.25% 0.28% 0.26% 0.33% 0.00% 0.09% 0.09% 0.03% 0.04% 0.24% 0.24% 0.25% 0.28% 0.26% 0.33% 0.00% 0.09% 0.09% 0.03% 0.04% 0.24% 0.25% 0.26% 0.33% 0.00% 0.09% 0.09% 0.00% 0.09% 0.00% 0.09% 0.00% 0.09% 0.00% 0.0	2023: May	4.0%	4.7%	2.5%	5.5%	0.14%	0.29%	0.28%	0.30%
2023: Aug 3.4% 3.8% 0.6% 4.9% 0.30% 0.10% 0.08% 0.16% 0.16% 2023: Sep 3.4% 3.7% 0.2% 4.9% 0.35% 0.32% 0.02% 0.02% 0.17% 0.17% 0.223: Nov 2.7% 3.2% 0.2% 4.9% 0.03% 0.13% 0.04% 0.17% 0.223: Nov 2.7% 3.2% 0.2% 4.3% 0.00% 0.09% 0.09% 0.24% 0.24% 0.225: Dec 2.7% 3.0% 0.0% 4.1% 0.15% 0.18% 0.26% 0.26% 0.33% 0.224 p. 2.2% 0.25% 0.24 p. 2.2% 0.25% 0.24 p. 2.2% 0.25% 0.25% 0.29% 0.29% 0.29% 0.24% 0.24% 0.25% 0.25% 0.25% 0.25% 0.26% 0.25% 0.10% 0.25% 0.25% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25% 0.25% 0.10% 0.25%	2023: Jun	3.3%	4.4%	1.7%		0.25%	0.26%		0.40%
2023: Sep	2023: Jul	3.4%	4.3%	1.2%	5.4%	0.14%	0.14%	-0.43%	0.33%
2023: Sep	2023: Aug	3.4%	3.8%	0.6%	4.9%	0.30%	0.10%	-0.08%	0.16%
2023: Nov 2.7% 3.2% 0.2% 4.3% 0.00% 0.09% -0.34% 0.24% 2023: Dec 2.7% 3.0% 0.0% 4.1% 0.15% 0.18% -0.26% 0.33% 2024: Jan 2.6% 3.1% -0.5% 4.3% 0.42% 0.50% -0.05% 0.68% 2024: Feb 2.6% 2.9% -0.4% 4.1% 0.31% 0.24% 0.29% 0.22% 2024: Mar 2.8% 3.0% -0.5% 4.1% 0.26% 0.26% 0.11% 0.33% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% 0.10% 0.26%	2023: Sep	3.4%	3.7%	0.2%	4.9%		0.32%		0.43%
2023: Dec 2.7% 3.0% 0.0% 4.1% 0.15% 0.18% -0.26% 0.33% 2024: Jan 2.6% 3.1% -0.5% 4.3% 0.4% 0.50% -0.0% 0.68% 2024: Feb 2.6% 2.9% -0.4% 4.1% 0.31% 0.24% 0.29% 0.22% 2024: Mar 2.8% 3.0% -0.5% 4.2% 0.34% 0.34% 0.07% 0.43% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.02% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Sul 2.3% 2.7% -0.4% 3.7% 0.17% 0.17% -0.17% 0.28%	2023: Oct	3.0%	3.4%	0.4%	4.5%	0.03%	0.13%	0.04%	0.17%
2024: Jan 2.6% 3.1% -0.5% 4.3% 0.42% 0.50% -0.05% 0.68% 2024: Feb 2.6% 2.9% -0.4% 4.1% 0.31% 0.24% 0.29% 0.22% 2024: Mar 2.8% 3.0% -0.5% 4.2% 0.34% 0.34% 0.07% 0.43% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: Jun 2.4% 2.6% 2.7% -1.0% 3.9% -0.01% 0.08% -0.17% 0.16% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jun 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% 0.16% 2024: Jun 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% 0.16% 2024: Jun 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% 0.16% 2024: Jun <	2023: Nov	2.7%	3.2%	0.2%	4.3%	0.00%	0.09%	-0.34%	0.24%
2024: Feb 2.6% 2.9% -0.4% 4.1% 0.31% 0.24% 0.29% 0.22% 2024: Mar 2.8% 3.0% -0.5% 4.2% 0.34% 0.07% 0.43% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: Jul 2.6% 2.7% -1.0% 3.9% -0.01% 0.08% -0.17% 0.16% 2024: Jul 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Aug 2.3% 2.7% -0.4% 3.7% 0.17% 0.17% -0.17% 0.28% 2024: Sep 2.1% 2.7% -0.4% 3.9% 0.17% 0.25% 0.11% 0.30% 2024: Dec 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% 0.17% 0.28% <td< td=""><td>2023: Dec</td><td>2.7%</td><td>3.0%</td><td>0.0%</td><td>4.1%</td><td>0.15%</td><td>0.18%</td><td>-0.26%</td><td>0.33%</td></td<>	2023: Dec	2.7%	3.0%	0.0%	4.1%	0.15%	0.18%	-0.26%	0.33%
2024: Mar 2.8% 3.0% -0.5% 4.2% 0.34% 0.03% 0.07% 0.43% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: May 2.6% 2.7% -1.0% 3.9% -0.01% 0.08% -0.17% 0.16% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Nov 2.5% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% </td <td>2024: Jan</td> <td>2.6%</td> <td>3.1%</td> <td>-0.5%</td> <td>4.3%</td> <td>0.42%</td> <td>0.50%</td> <td>-0.05%</td> <td>0.68%</td>	2024: Jan	2.6%	3.1%	-0.5%	4.3%	0.42%	0.50%	-0.05%	0.68%
2024: Mar 2.8% 3.0% -0.5% 4.2% 0.34% 0.03% 0.07% 0.43% 2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: May 2.6% 2.7% -1.0% 3.9% -0.01% 0.08% -0.17% 0.16% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Nov 2.5% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% </td <td>2024: Feb</td> <td>2.6%</td> <td>2.9%</td> <td>-0.4%</td> <td>4.1%</td> <td>0.31%</td> <td>0.24%</td> <td>0.29%</td> <td>0.22%</td>	2024: Feb	2.6%	2.9%	-0.4%	4.1%	0.31%	0.24%	0.29%	0.22%
2024: Apr 2.7% 2.9% -0.5% 4.1% 0.26% 0.26% 0.11% 0.30% 2024: May 2.6% 2.7% -1.0% 3.9% -0.01% 0.08% -0.17% 0.16% 2024: Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024: Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024: Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% 0.12% 0.17% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% 0.06% 0.38% <td>2024: Mar</td> <td>2.8%</td> <td>3.0%</td> <td>-0.5%</td> <td>4.2%</td> <td></td> <td>0.34%</td> <td>0.07%</td> <td>0.43%</td>	2024: Mar	2.8%	3.0%	-0.5%	4.2%		0.34%	0.07%	0.43%
2024; Jun 2.4% 2.6% -0.7% 3.8% 0.12% 0.22% 0.10% 0.26% 2024; Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024; Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024; Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024; Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024; Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024; Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025; Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025; Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% <	2024: Apr	2.7%	2.9%	-0.5%		0.26%	0.26%	0.11%	0.30%
2024; Jul 2.5% 2.7% -0.4% 3.7% 0.17% 0.17% -0.10% 0.26% 2024; Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024; Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024; Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024; Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024; Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025; Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025; Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025; Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25%	2024: May	2.6%	2.7%	-1.0%	3.9%	-0.01%	0.08%	-0.17%	0.16%
2024: Aug 2.3% 2.7% -0.5% 3.8% 0.12% 0.17% -0.17% 0.28% 2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.25% 0.28% 0.38% 0.25%	2024: Jun	2.4%	2.6%	-0.7%	3.8%	0.12%	0.22%	0.10%	0.26%
2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.38% 0.25%	2024: Jul	2.5%	2.7%	-0.4%	3.7%	0.17%	0.17%	-0.10%	0.26%
2024: Sep 2.1% 2.7% -0.4% 3.7% 0.17% 0.25% 0.11% 0.30% 2024: Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.38% 0.25%	2024: Aug	2.3%	2.7%	-0.5%	3.8%	0.12%	0.17%	-0.17%	0.28%
2024: Oct 2.3% 2.8% -0.4% 3.9% 0.27% 0.30% 0.06% 0.38% 2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.24% <	2024: Sep			-0.4%		0.17%	0.25%	0.11%	0.30%
2024: Nov 2.5% 2.8% -0.1% 3.8% 0.11% 0.10% -0.12% 0.17% 2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.38% 0.25% 2025: Jul 2.8% 3.0% 1.6% 3.4% 0.34% 0.24% 0.28% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.24		2.3%	2.8%	-0.4%	3.9%	0.27%	0.30%	0.06%	0.38%
2024: Dec 2.6% 2.9% -0.2% 3.9% 0.29% 0.21% -0.28% 0.37% 2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.38% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24%	2024: Nov			-0.1%					
2025: Jan 2.5% 2.6% 0.3% 3.4% 0.33% 0.28% 0.41% 0.24% 2025: Feb 2.5% 2.7% 0.2% 3.6% 0.32% 0.33% 0.16% 0.39% 2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.24% 0.28% 0.39% 0.25% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.25% <td>2024: Dec</td> <td></td> <td></td> <td></td> <td></td> <td>0.29%</td> <td>0.21%</td> <td></td> <td>0.37%</td>	2024: Dec					0.29%	0.21%		0.37%
2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.25% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%	2025: Jan	2.5%	2.6%	0.3%	3.4%	0.33%			0.24%
2025: Mar 2.4% 2.7% 0.5% 3.4% 0.21% 0.28% 0.38% 0.25% 2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.25% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%	2025: Feb	2.5%	2.7%	0.2%	3.6%	0.32%	0.33%	0.16%	0.39%
2025: Apr 2.4% 2.7% 0.8% 3.4% 0.25% 0.28% 0.38% 0.25% 2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%	2025: Mar	2.4%	2.7%						0.25%
2025: May 2.6% 2.9% 1.3% 3.4% 0.24% 0.28% 0.39% 0.25% 2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%									
2025: Jun 2.8% 3.0% 1.6% 3.4% 0.34% 0.27% 0.39% 0.23% 2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.24% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%									
2025: Jul 2.8% 3.0% 1.9% 3.4% 0.13% 0.22% 0.19% 0.22% 2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.24% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%	,								
2025: Aug 2.9% 3.1% 2.3% 3.3% 0.23% 0.22% 0.19% 0.24% 2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.24% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%	*								
2025: Sep 2.9% 3.0% 2.3% 3.3% 0.16% 0.21% 0.10% 0.24% 2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%									
2025: Oct 2.8% 2.9% 2.3% 3.1% 0.16% 0.21% 0.10% 0.25% 2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%									
2025: Nov 2.9% 3.0% 2.5% 3.2% 0.19% 0.21% 0.10% 0.25%									
	2025: Dec	2.8%	3.1%	2.9%	3.1%	0.26%	0.21%	0.10%	0.25%

Source: BEA, BofA Global Research



Federal Reserve Balance Sheet

Exhibit 20: Factors affecting reserve balances of depository institutions (H.4.1 Table 1) The balance sheet of the Federal Reserve (\$bn, Wednesday, end of period values)

	19 M ar	7-day chg	4 week chg	Chg since June 1, 2022
Supplying reserve funds (Federal Reserve assets)	13 IVIdi	7-uay ciig	4 week clig	2022
Reserve Bank credit outstanding	6709.4	-3.4	-26.8	-2169.2
Securities held outright	6442.4	-5.5	-28.8	-2038.2
US Treasuries	4236.8	-5.4	-14.5	-1534.0
Federal Agency	2.3	0.0	0.0	0.0
Mortgage-backed securities	2203.3	-0.1	-14.3	-504.2
Unamortized premiums on securities held outright	244.0	-0.4	-2.0	-93.1
Unamortized discounts on securities held outright	-24.0	0.2	0.3	0.5
Repurchase agreements	0.0	0.0	0.0	0.0
Foreign official (FIMA repo facility)	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0
Loans	4.0	-0.3	-1.3	-16.7
of which:				
Discount window (primary and secondary credit)	2.1	-0.3	-1.1	1.3
Paycheck protection program (PPPLF)	1.9	0.0	0.0	-17.9
Bank Term Funding Program (BTFP)	0.0	0.0	-0.2	0.0
Other credit extensions	0.0	0.0	-0.2	0.0
Other factors supplying reserve funds	43.0	2.6	5.0	-21.8
Total factors supplying reserve funds	6807.0	-3.5	-26.1	-2157.3
Absorbing reserve funds (Federal Reserve liabilities)				
Currency in circulation	2368.4	2.2	14.7	88.4
Reverse repo agreements	571.5	49.3	110.4	-1659.1
Foreign official accounts	378.1	-13.0	-9.7	112.6
Others (ON RRP)	193.4	62.3	120.2	-1771.6
Treasury cash holdings	0.4	0.0	0.0	0.3
Other deposits with Federal Reserve Banks	607.4	-23.7	-300.0	-421.1
of which:				
Treasury General Account	415.8	-34.9	-323.1	-364.8
Treasury contributions to credit facilities	3.5	0.0	0.0	-14.5
Other Federal Reserve liabilities and capital	-169.8	2.6	-0.8	-219.8
Factors absorbing reserves, other than reserves	3381.3	30.5	-175.7	-2225.7
Reserve balances with Federal Reserve banks	3425.7	-34.0	149.6	68.3

Source: Federal Reserve, Haver Analytics, BofA Global Research. Note: Quantitative tightening began on June 1, 2022.



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 Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): Bof 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.bofaml.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 (Australia): Merrill Lynch (Hong Kong): Merrill (Hong Kong): Merr (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch (Canada): Merrill Lynch (Canada): Merrill Lynch (Mexico): Merrill Mexico): Merrill Mexico (Mexico): Merrill Mexico): Merrill Mexico (Mexico): Merrill Mexico (Mexico de Bolsa, regulated by the Comisión Nacional Bancaría y 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 (DIFC): Merrill Lynch (DIFC): Merrill Lynch (Brazil): M 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 HKSFC; 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 2025 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. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any Al application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. 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. Invest

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 sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

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

Aditya Bhave US Economist BofAS aditya.bhave@bofa.com

Stephen Juneau US Economist BofAS stephen.juneau@bofa.com

Shruti Mishra US Economist BofAS smishra44@bofa.com

Jeseo Park

US Economist BofAS jeseo.park@bofa.com

