US Economic Weekly

One step closer

12 January 2024

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Key takeaways

- Disinflation and a cooling labor market likely keep the Fed on track to ease in March
- We expect the Fed to slow balance sheet runoff in March and end quantitative tightening in June

Macro viewpoint

Michael Gapen says:
Until it sees further progress on services inflation, the Fed will likely be concerned about upside risks to inflation and send the message that it cannot rule out further hikes. This is normal; policymakers prefer to retain options rather than eliminate them. That said, we think the combination of the soft underlying tone of the December employment report – where employment gains have become more narrowly driven – combined with the undeniably encouraging progress towards the 2% inflation target are likely to move the Fed one step closer to normalizing its policy stance.

US GDP tracking

4Q US GDP tracking has risen two-tenths to 1.3% q/q saar from our last estimate on December 14.

Data preview

December retail sales: 'Tis the seasonal(s). We expect the December retail sales report to come in above consensus, with the ex-autos and core control components increasing by 1.1% and 0.7%, respectively. The Census Bureau is projecting a significantly more favorable seasonal adjustment for December 2023 than we have seen in prior Decembers. Our base case is that this will swamp the underlying signal from the data, leading to a robust print. Stepping back, we think spending is healthy but not surging.

Fed outlook

A slower pace of balance sheet runoff (quantitative tightening, or QT). We expect the Fed to reduce the maximum runoff caps on Treasury securities beginning in March and look for QT to end in June. We look for no change in MBS redemption caps.

The expiration of the Bank Term Funding Program (BTFP). With improved conditions in bank funding markets, we think it's time to let the BTFP expire. We think that happens in March, on schedule with prior Fed guidance.

Timestamp: 12 January 2024 04:30AM EST

One step closer

- December CPI inflation was a touch above our expectation, but the deceleration in core inflation continues to point to softer underlying inflation.
- We expect the Fed to taper the pace at which it lets Treasury securities mature from its balance sheet beginning in March. QT should end in June.
- We look for the Bank Term Funding Program to expire as scheduled in March.

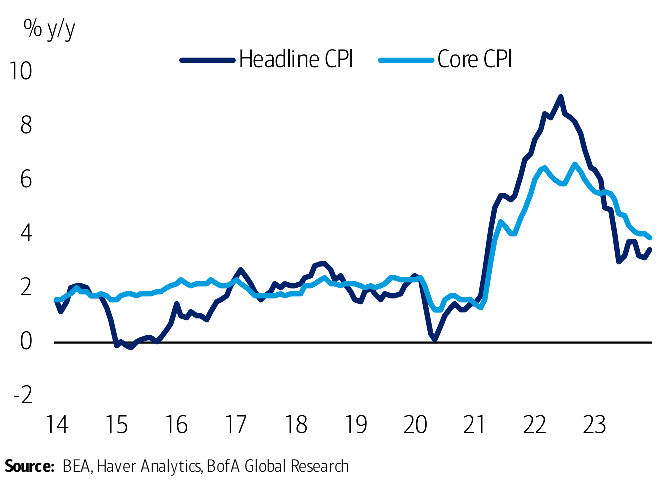
December data on labor markets and inflation, in our view, bring the Federal Reserve one step closer to normalizing its policy stance. The December CPI report was a touch stronger than we anticipated, with headline and core CPI both rising by 0.3%m/n (0.30% and 031%, respectively, to two decimals), versus our expectations for readings of 0.26% and 0.27%). The report moved the y/y change in headline CPI inflation higher, to 3.4% from 3.1% on account of a larger-than-expected increase in energy prices. That said, stripping out volatile energy and food prices, the 3m annualized change in core CPI fell to 3.3% and the y/y change decelerated to 3.9% from 4.0%, the first sub-4.0% y/y reading since May 2021. Despite the modest upside miss relative to our forecast, we think the December CPI report still suggests that inflation is cooling, particularly since the read-through from CPI into the Fed's preferred inflation measure – PCE inflation – is likely to be favorable, on net.

Two sides of the same coin

The CPI data continue to show a marked divergence between goods and services inflation: improved supply chains have driven rapid disinflation in goods while services inflation has remained sticky. After six consecutive monthly declines, core goods prices in December were unchanged, owing largely to increases in new and used car prices. In our view, used car prices have temporarily benefitted from the UAW autoworkers strike and the halt in new car production (used car prices In November and December rose by 1.6% and 0.5%, respectively). Excluding used cars, core goods prices fell by 0.1%. Our outlook for moderate monthly declines in goods prices remains in place.

Core services, meanwhile, rose by 0.4% m/m. Shelter remains a source of sticky inflation with owners' equivalent rent (OER) rising 0.5% and rents increasing 0.4%. Despite significant moderation in asking rent inflation, CPI rents continue to run above pre-pandemic levels and are decelerating more slowly than prior historical experience would

Exhibit 1: Headline and core CPI inflation (% change, y/y)
Headline inflation ticked higher in December, while core decelerated further



Source: BEA, Haver Analytics, BofA Global Research

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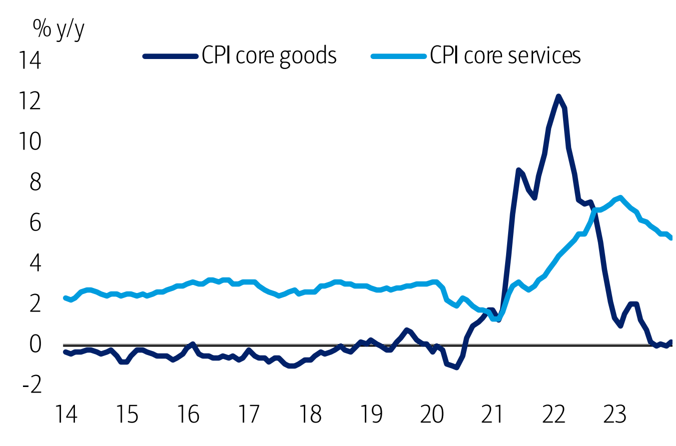
Exhibit 2: CPI: core goods and core services
Core goods prices have "round-tripped", while services inflation is sticky



Source: BEA, Haver Analytics, BofA global Research

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suggest. We suspect that this reflects regional dynamics as rents in the Northeast have proven firmer, but it also may be due to rents still playing catch-up to the level of asking rents. Either way, we think shelter inflation will follow actual rents lower, but still believe the process will take more time than many expect.

Finally, core services ex-shelter rose by 0.4% m/m. The details point to broad-based strength in services inflation as medical care services and recreation services inflation accelerated on the month. The strength in medical care services inflation partially reflects health insurance continuing to increase by roughly 1.1% m/m. This is largely a function of the BLS' methodology. That said, inflation for hospital services and professional services was relatively strong. We have seen rapid hiring in the sector, and an aging population could contribute to sustained inflation in this sector. Meanwhile, the strength in recreation services inflation is most likely demand driven.

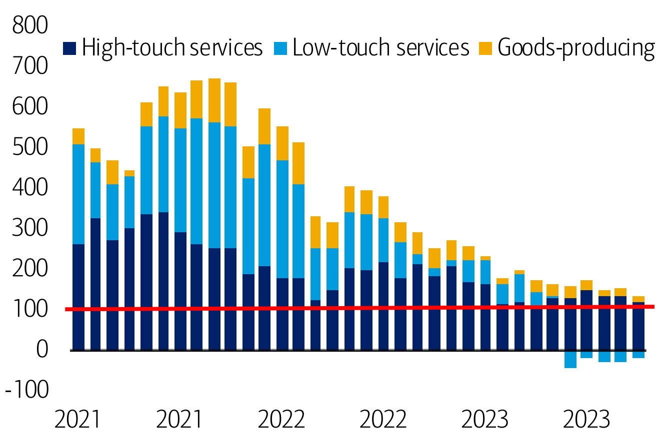
On track for cuts – and the tapering of runoff – in March

Until it sees further progress on services inflation, the Fed will likely be concerned about upside risks to inflation and send the message that it cannot rule out further hikes. This is normal; policymakers prefer to retain options rather than eliminate them. That said, we think the combination of the soft underlying tone of the December employment report – where employment gains have become more narrowly driven – combined with the undeniably encouraging progress towards the 2% inflation target are likely to move the Fed one step closer to normalizing its policy stance.

Policy normalization is likely forthcoming on two fronts. First, we retain our view that the Fed will begin a gradual rate cut cycle beginning in March, and we expect 25bp rate cuts in March, June, September and December for a total of 100bp in cuts this year. Second, based on recent Fed communications, we think the Fed is nearing the time when it will slow the pace of securities runoff from its balance sheet (see Jan 8 report here for details). When the Fed lets maturing securities roll off its balance sheet, it drains liquidity from financial markets. At first this process is smooth since liquidity is flush, but reserve drainage is uneven across institutions and can lead to spikes in liquidity demand as liquidity scarcity is reached. We suspect we are closer to that point than many think and look for the Fed to announce a reduction in redemption caps on Treasuries in March and an end to quantitative balance sheet tightening in June.

Finally, the Fed opened the Bank Term Funding Program (BTFP) last March to address funding strains in the banking sector following the failure of Silicon Valley Bank. Given the improvement in funding conditions since then, lower long-term rates, and steps taken to address unrealized losses by banks, we think the BTFP will expire on schedule (see report) this March.

Exhibit 3: Monthly payroll employment change (thous)
Growth in payrolls is more narrowly driven than before



Source: BLS, Haver Analytics, BofA Global Research

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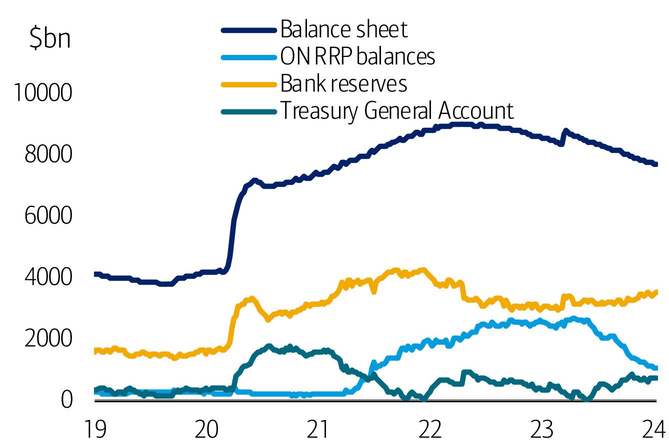
Exhibit 4: Balance sheet of the Federal Reserve ($bn)
Balance sheet runoff has reduces ON RRP balances rapidly



Source: Federal Reserve, Haver Analytics, BofA Global Research

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US GDP Tracking

4Q GDP tracking up two-tenths to 1.3% q/q saar

November single family housing starts came in higher than expected. Along with slightly stronger than assumed existing home sales growth in November, this increased our 4Q residential tracking estimate.

Manufacturing inventories in November printed stronger than our expectations and increased our 4Q inventory accumulation tracking.

At 15.8 million units in December, vehicle sales were above our assumption. This increased our 4Q tracking for personal consumption expenditures and equipment investment.

In the December employment report, payrolls of residential remodelers came in higher than expected and increased our 4Q residential investment tracking.

Overall, since our last weekly publication, our 4Q US GDP tracking estimate is up two-tenths to 1.3% q/q saar, while 3Q GDP finalized at 4.9% q/q saar in the third estimate. Next week, December retail sales, import prices, industrial production, housing starts, existing home sales and November business inventories will affect 4Q and 3Q GDP tracking.

Exhibit 5: BofA US GDP tracking estimate (% q/q saar)

Our 4Q GDP tracking estimate is up two-tenths to 1.3% q/q saar, largely due to higher than expected Nov housing starts, Dec vehicle sales and payrolls

Date	Data release	GDP	Final Sales	PCE	Res. Inv.	Struct	Equip	IPP	Gov.	Exports	Imports	Net exports (level)	CIPI (level)
12/15/23	Industrial Production	**1.1**	**1.8**	**1.9**	-1.8	**1.8**	**1.2**	2.5	2.2	8.7	6.2	-933.6	13.4
12/20/23	Housing Starts and Permits, Existing Home Sales	**1.2**	1.8	1.9	**0.0**	1.8	1.2	2.5	2.2	8.7	6.2	-933.6	13.4
12/21/23	GDP (T) 3Q	**1.1**	**1.7**	1.9	0.0	1.8	1.2	2.5	2.2	8.7	6.2	-933.6	**18.0**
12/22/23	PCE, Durable Goods Orders, New Home Sales	**1.1**	**1.7**	**1.7**	**-0.5**	1.8	**1.9**	2.5	2.2	8.7	6.2	-933.6	**31.3**
12/28/23	Advance Goods Trade Balance, Retail & Wholesale Inventories	0.9	1.5	1.7	-0.5	1.8	1.9	2.5	2.2	**1.7**	**3.2**	**-947.1**	**23.7**
1/2/24	Construction Spending	**0.9**	**1.5**	**1.7**	**-1.2**	**3.3**	1.9	2.5	**2.6**	1.7	3.2	-947.1	23.7
1/4/24	Vehicle Sales	**1.0**	**2.1**	**1.9**	-1.2	3.3	**2.6**	2.5	2.6	1.7	3.2	-947.1	23.7
1/5/24	Payrolls, Factory Orders	**1.1**	2.1	1.9	**-0.2**	3.3	**2.8**	2.5	**2.3**	1.7	3.2	-947.1	**26.0**
1/9/24	Trade Balance	**1.3**	2.1	1.9	-0.2	3.3	2.8	2.5	2.3	**2.2**	**2.2**	**-935.5**	26.0
1/10/24	Wholesale Inventories	1.3	2.1	1.9	-0.2	3.3	2.8	2.5	2.3	2.2	2.2	-935.5	**26.5**
1/11/24	CPI	1.3	2.0	1.9	-0.2	3.3	2.8	2.5	2.3	2.2	2.2	-935.5	**26.5**
	GDP tracking	1.3	2.0	1.9	-0.2	3.3	2.8	2.5	2.3	2.2	2.2	-935.5	26.5
	Contribution to GDP growth (pp)			1.3	0.0	0.1	0.1	0.1	0.4			-0.1	-0.7
	BofA official GDP forecast	1.5	2.0	2.5	1.0	1.0	2.0	2.5	2.0	3.0	2.0	-929.0	38.0

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.

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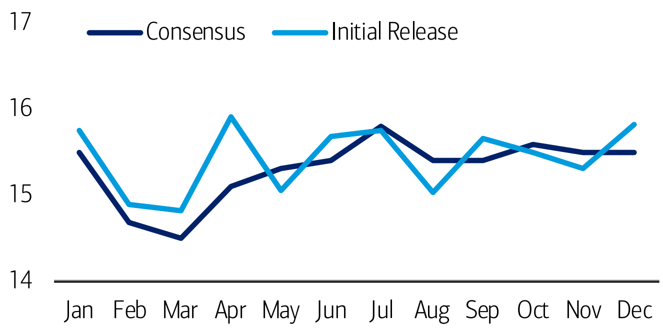
Exhibit 6: Vehicle Sales (m/m % change)

December vehicle sales came in stronger than expected



Source: BofA Global Research, Bloomberg

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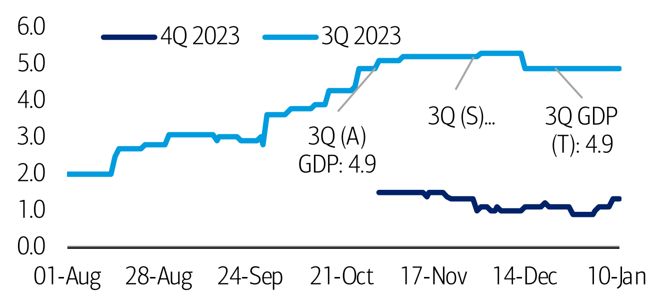
Exhibit 7: 3Q and 4Q GDP tracking evolution (% q/q, SAAR)

4Q GDP tracking is up two-tenths to 1.3% q/q saar since our last weekly publication, while 3Q GDP finalized at 4.9% q/q saar in the third estimate



Source: BofA Global Research

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Data in the past week

Data in the past week

The December CPI report topped consensus expectations as both headline and core rose by 0.3% m/m.

Date	Time	Indicator	Period	Actual	Consensus	Previous
1/09/24	6:00	NFIB Small Business Optimism	Dec	91.9	91.0	90.6
1/10/24	10:00	Wholesale Inventories	Nov F	-0.2%	-0.2%	-0.2%
1/11/24	8:30	Initial Jobless Claims	Jan 06	202k	210k	203k
1/11/24	8:30	Consumer Price Index (yoy)	Dec	3.4%	3.2%	3.1%
1/11/24	8:30	CPI Ex Food & Energy (yoy)	Dec	3.9%	3.8%	4.0%
1/11/24	8:30	Consumer Price Index (mom)	Dec	0.3%	0.2%	0.1%
1/11/24	8:30	CPI Ex Food & Energy (mom)	Dec	0.3%	0.3%	0.3%
1/11/24	14:00	Monthly Budget Statement	Dec	-$129.4bn	-$87.5bn	-$85.0.0bn
1/12/24	8:30	Producer Price Index (mom)	Dec	NR	0.1%	0.0%

Source: Bloomberg, BofA Global Research. NR: Not Released

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Data in the week ahead

January 16th - 19th

Next week the focus will be on retail sales, industrial production and housing starts and permits

Date	Time	Indicator	Period	BofA Estimate	Consensus	Previous
1/16/24	8:30	Empire Manufacturing	Jan	-2.0	-2.9	-14.5
1/17/24	7:00	MBA Mortgage Applications	Jan 12	—	—	9.9%
1/17/24	8:30	Import Price Index (mom)	Dec	-0.5%	-0.7%	-0.4%
1/17/24	8:30	Import Price Index ex Petroleum (mom)	Dec	0.0%	—	0.2%
1/17/24	8:30	Advance Retail Sales	Dec	1.2%	0.4%	0.3%
1/17/24	8:30	Retail Sales Less Autos	Dec	1.1%	0.2%	0.2%
1/17/24	8:30	Retail Sales Less Autos and Gas	Dec	1.0%	0.3%	0.6%
1/17/24	8:30	Core Control	Dec	0.7%	0.3%	0.4%
1/17/24	9:15	Industrial Production	Dec	0.3%	-0.1%	0.2%
1/17/24	9:15	Manufacturing Production	Dec	0.3%	-0.1%	0.3%
1/17/24	9:15	Capacity Utilization	Dec	79.0%	78.6%	78.8%
1/17/24	10:00	Business Inventories	Nov	—	-0.1%	-0.1%
1/17/24	10:00	NAHB Housing Market Index	Jan	39	38	37
1/18/24	8:30	Housing Starts	Dec	1450k	1415k	1560k
1/18/24	8:30	Building Permits	Dec	1480k	1480k	1467k
1/18/24	8:30	Initial Jobless Claims	Jan 13	204k	—	202k
1/19/24	10:00	Existing Home Sales	Dec	3.95M	3.84M	3.82M
1/19/24	10:00	U. of Michigan Sentiment	Jan P	70.0	68.0	69.7

Source: Bloomberg, BofA Global Research

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Federal Reserve Speakers

Exhibit 8: Upcoming policy speakers
Key speaking engagements and news events*

Date	Time	Speaker
16-Jan	11:00	Fed's Waller Speaks on Economic Outlook and Monetary Policy
17-Jan	14:00	Federal Reserve Releases Beige Book
17-Jan	15:00	Fed's Williams Speaks at NY Fed Event
18-Jan	7:30	Fed's Bostic Speaks on Economic Outlook
18-Jan	11:30	Fed's Bostic Speaks on Economic Outlook
19-Jan	16:15	Fed's Daly Speaks in Fireside Chat

Source: Bloomberg

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Exhibit 9: Summary of Fed speak in the previous week
Below is a summary of key quotes from Fed speakers over the past week

Speaker	Date	Quote
Mester (Cleveland)	11-Jan	"I think March is probably too early in my estimation for a rate decline because I think we need to see some more evidence." "I think the December CPI report just shows there's more work to do, and that work is going to take restrictive monetary policy."
Williams (NY fed)	10-Jan	"My base case is that the current restrictive stance of monetary policy will continue to restore balance and bring inflation back to our 2% longer-run goal." "The timing of when [interest rates come down] that happens and the speed at which that happens will depend on how inflation evolves, how the economy evolves." "[FOMC] Intends to slow and then stop the decline in the size of the balance sheet when reserve balances are somewhat above the level it judges to be consistent with ample reserves. So far, we don't seem to be close to that point"
Barr (Vice Chair of Supervision)	9-Jan	Signals BTFP will end on March 11, when it expires
Bowman	8-Jan	"Should inflation continue to fall closer to our 2% goal over time, it will eventually become appropriate to begin the process of lowering our policy rate to prevent policy from becoming overly restrictive." "I will remain cautious in my approach to considering future changes in the stance of policy,"
Bostic (Atlanta)	8-Jan	"We are in a restrictive stance and I'm comfortable with that, and I just want to see the economy continue to evolve with us in that stance and hopefully see inflation continue to get to our 2% level Expects 2 rate cuts this year starting in 3Q "Open question" if and when the Fed should alter B/S reduction pace
Logan (Dallas)	7-Jan	"In my view, we should slow the pace of runoff as ON RRP balances approach a low level" "In light of the easing in financial conditions in recent months, we shouldn't take the possibility of another rate increase off the table just yet."

Source: Bloomberg

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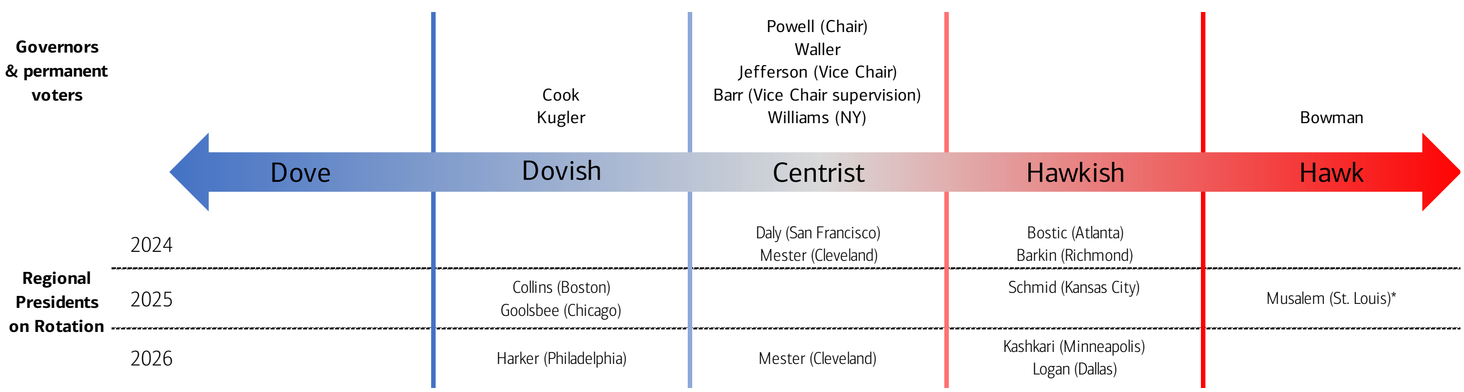
Exhibit 10: BofA US Economics Dove-Hawk chart
This year the regional presidents voting on the FOMC (Federal Open Market Committee) will be Daly, Mester, Bostic and Barkin



Source: BofA Global Research

*Musalem was recently announced as President of the St. Louis Fed. We have yet to hear him comment on monetary policy. Therefore, this is a preliminary placement.

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Federal Reserve Balance Sheet

The balance sheet fell by $53bn in the past four weeks

The Fed continues to let up to $60bn of maturing Treasury securities roll off its balance sheet each month, while also reducing holdings of agency mortgage-backed securities by up to $35bn. In the week ending January 10, the Fed's balance sheet rose by $6.1bn (H.4.1 Table 1). In the past four weeks, the balance sheet has shrunk by $53.1bn. Balance sheet runoff continues to reduce take-up in the overnight reverse repo facility (ON RRP), which has fallen by $111.1bn over the past four weeks.

Expected expiration of the BTFP may be prompting precautionary usage: Lending through the BTFP rose by $6.0bn to $147.2bn. In our view, the increase in lending through the BTFP is likely precautionary in nature and related to the expected expiration of the program this March. Usage of other emergency lending facilities (Discount Window lending, FDIC loans, and FIMA) has largely fallen off since the failure of Silicon Valley Bank last march.

Exhibit 11: The balance sheet of the Federal Reserve ($bn, Wednesday, end of period values)

Factors affecting reserve balances of depository institutions (H.4.1 Table 1)

$bn, Wednesday, end of period values	10 Jan	7-day chg	4 week chg	Chg since June 1, 2022
Supplying reserve funds (Federal Reserve assets)				
Reserve Bank credit outstanding	7650.3	6.1	-53.1	-1228.3
Securities held outright	7185.6	-1.8	-73.3	-1294.9
US Treasuries	4751.5	-1.8	-58.2	-1019.3
Federal Agency	2.3	0.0	0.0	0.0
Mortgage-backed securities	2431.8	0.0	-15.1	-275.7
Unamortized premiums on securities held outright	278.1	-0.5	-2.6	-59.0
Unamortized discounts on securities held outright	-25.7	0.1	0.7	-1.2
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	152.7	5.9	23.1	132.0
of which:				
Discount window (primary and secondary credit)	2.1	-0.1	-0.1	1.2
Paycheck protection program (PPPLF)	3.4	0.0	-0.2	-16.4
Bank Term Funding Program (BTFP)	147.2	6.0	23.4	147.2
Other credit extensions	0.0	0.0	0.0	0.0
Other factors supplying reserve funds	59.6	2.5	-1.0	-5.2
Total factors supplying reserve funds	7737.5	6.1	-52.9	-1226.9
Absorbing reserve funds (Federal Reserve liabilities)				
Currency in circulation	2340.5	-7.7	9.1	60.5
Reverse repo agreements	1041.1	-44.8	-111.1	-1189.4
Foreign official accounts	361.2	-4.9	32.3	95.7
Others	680.0	-39.9	-143.4	-1285.1
Treasury cash holdings	0.4	0.0	0.0	0.3
Other deposits with Federal Reserve Banks	892.9	-20.9	93.2	-135.5
of which:				
Treasury General Account	727.9	-15.6	97.2	-52.7
Treasury contributions to credit facilities	7.4	0.0	-2.9	-10.5
Other Federal Reserve liabilities and capital	-82.3	1.7	-10.8	-132.3
Factors absorbing reserves, other than reserves	4200.1	-71.8	-22.5	-1406.9
Reserve balances with Federal Reserve banks	3537.4	78.0	-30.4	180.0

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

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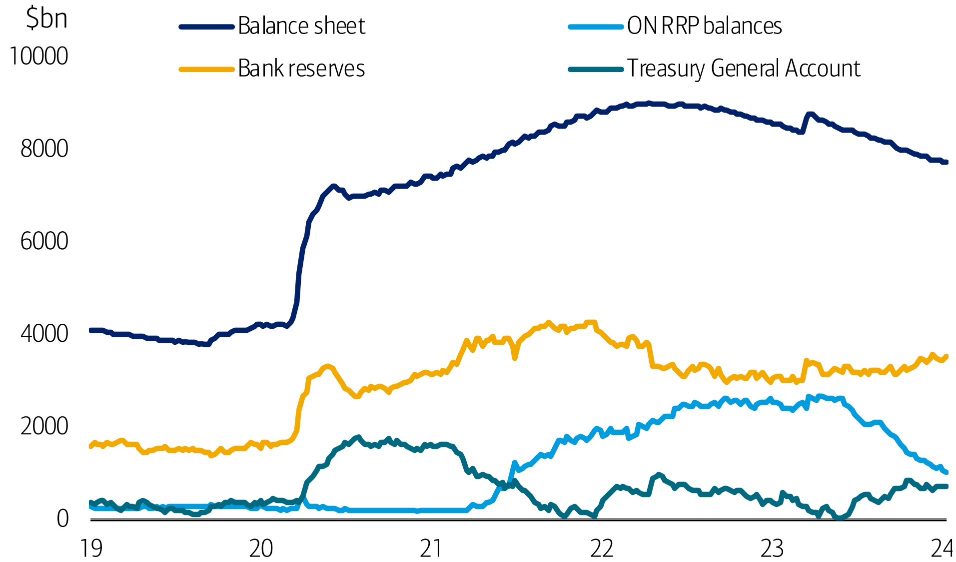
Exhibit 12: The balance sheet, ON RRP balances, bank reserves, and Treasury General Account ($bn)
Nearly all the drain in liquidity from balance sheet runoff has shown up in lower ON RRP balances while bank reserves have been largely stable



Source: Federal Reserve, Haver Analytics, BofA Global Research

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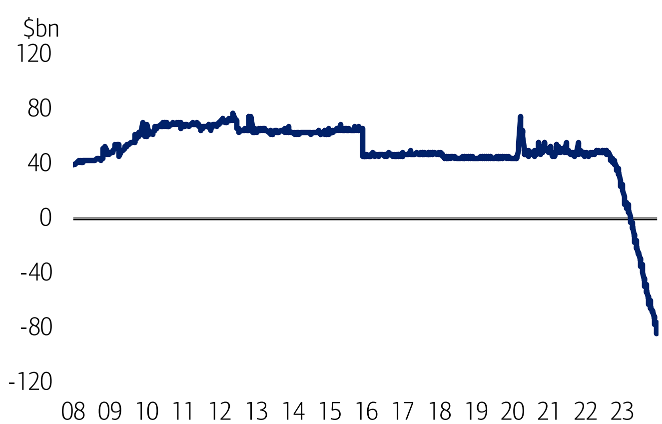
Losses on the Fed's balance sheet: The Fed continues to pay more in interest on reserves than it earns on its securities holdings. Earnings that are retained to cover this loss are booked as a negative liability on the balance sheet under "interest on Federal Reserve Notes due to the US Treasury" in the line item "other Federal Reserve liabilities and capital". The cumulative value of the shortfall in earnings (the "deferred asset") is $71.5bn.

Exhibit 13: Other Federal Reserve Liabilities and Capital ($bn)
Federal Reserve losses are mounting



Source: Federal Reserve, Haver Analytics, BofA Global Research

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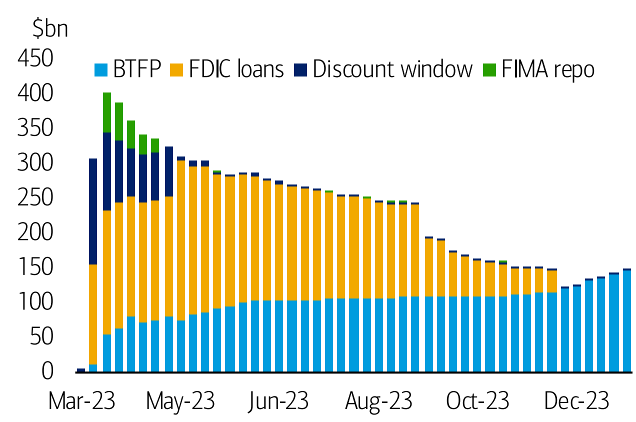
Exhibit 14: Federal Reserve Emergency Lending Facilities ($bn)
Lending through the BTFP has been ticking higher



Source: Federal Reserve, Haver Analytics, BofA Global Research

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Core views

Growth: Soft landing

- We expect a soft landing for the US economy, where growth falls below trend in 2024, but remains positive. We marked up growth in private consumption while maintaining a slowdown in non-consumer related components like residential investment, nonresidential investment, and government spending. We now expect growth in real US GDP of 1.2% 4Q/4Q in 2024, up 0.6pp, and 2.0% in 2025 (See Sticking the landing)

Inflation: Moving in the right direction, but sticky

- PCE inflation falls to 2.0% y/y in 3Q25. Core PCE will now likely fall below 3% y/y by 1Q24. But the road to 2% will likely be slower due to sticky core services ex-housing inflation. We expect core PCE to fall to a slightly above target 2.5% y/y by 4Q24.

Federal Reserve policy rates: Fewer cuts than markets expect

- We do not expect any further hikes from the Fed. We expect the first rate cut in March 2024, followed by quarterly 25bp reductions in the policy rate for a total of 100bp of rate cuts in 2024 and 100bp in 2025.

Federal Reserve balance sheet: An end to runoff in June

- In a “normalization” cutting cycle, where the Fed lowers its policy rate to follow inflation down during a soft landing, runoff can continue past the first rate cut. If the Fed is easing in response to rising recession risk, then runoff may end when cuts begin. There is considerable uncertainty around the timing of the end of balance sheet runoff given the difficulty in estimating reserve demand.

- We expect the Fed to reduce the redemption caps on Treasury securities beginning in March and an end to quantitative tightening (QT) in June. We do not expect the Fed to alter redemption caps on MBS securities given its preference for an all-Treasury portfolio. When QT ends, maturing MBS securities will be reinvested back into Treasury securities. (see Logan and QT: QT taper now in March)

Federal Reserve: An end to emergency lending

- We look for the Bank Term Funding Program (BTFP) to expire as scheduled in March. (See BTFP to expire on schedule)

Fiscal policy: Caution: drag ahead

- Fiscal policy bills and other idiosyncratic factors contributed to resiliency of the economy in 2023. However, the impulse to growth should turn negative in 2024. Fiscal sustainability is an ongoing concern that could be exacerbated by higher interest rates (See Fiscal impulse: running out of steam).

Labor markets: The virtuous cycle continues

- The post-pandemic surge in labor force participation has led to a surge in total hours, and supported growth in disposable income, helping to keep consumer spending elevated despite higher interest rates. We think this has some further room to run in 2024 but foresee the participation rate drifting down toward its underlying demographic trend in 2025 and beyond.

Economic forecast summary

Exhibit 15: BofA US economic outlook

We continue to expect a soft landing for the US economy

	1Q 23	2Q 23	3Q 23	4Q 23	1Q 24	2Q 24	3Q 24	4Q 24	1Q 25	2Q 25	3Q 25	4Q 25	2022	2023	2024	2025
Real Economic Activity, % SAAR																
Real GDP	2.2	2.1	4.9	1.5	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	1.9	2.4	1.7	1.8
% Change, Year Ago	1.7	2.4	2.9	2.7	2.3	2.1	1.2	1.2	1.5	1.8	1.9	2.0				
Final Sales	4.6	2.1	3.6	2.0	1.5	1.0	1.5	1.5	2.0	2.0	1.5	1.5	1.3	2.8	1.8	1.7
Domestic Demand	3.8	2.0	3.5	2.0	1.5	1.0	1.5	1.5	2.0	2.0	2.0	2.0	1.7	2.2	1.8	1.7
Consumer Spending	3.8	0.8	3.0	2.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.2	1.8	1.8
Residential Investment	-5.3	-2.2	6.7	1.0	-0.5	-0.5	1.5	2.0	2.5	2.5	2.5	2.5	-9.0	-10.7	1.0	2.2
Nonresidential Investment	5.7	7.4	1.5	2.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	5.2	4.4	1.8	2.0
Structures	30.3	16.1	11.2	1.0	-1.0	-1.0	1.0	1.0	1.5	1.5	2.0	2.0	-2.1	12.6	2.3	1.4
Equipment	-4.1	7.7	-4.4	2.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	5.2	-0.1	1.1	1.9
Intellectual Property	3.8	2.7	1.8	2.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	3.0	9.1	4.4	2.2	2.5
Government	4.8	3.3	5.8	2.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	-0.9	3.9	1.8	0.8
Exports	6.8	-9.3	5.4	3.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	7.0	2.5	1.4	1.8
Imports	1.3	-7.6	4.2	2.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	8.6	-1.7	1.2	1.7
Net Exports (Bil 12$)	-935	-928	-931	-929	-933	-938	-940	-943	-947	-951	-955	-958	-1051	-931	-938	-953
Contribution to growth (ppts)	0.6	0.0	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.5	0.0	0.0
Inventory Accumulation (Bil 12$)	27.2	14.9	77.8	38.0	23.0	16.0	13.0	20.0	29.0	38.0	53.0	68.0	128.1	39.4	17.8	46.8
Contribution to growth (ppts)	-2.2	0.0	1.3	-0.7	-0.3	-0.1	-0.1	0.1	0.2	0.2	0.2	0.2	0.6	-0.4	-0.1	0.1
Nominal GDP (Bil $, SAAR)	26814	27063	27610	27884	28114	28354	28650	28923	29256	29572	29880	30197	25744	27343	28510	29726
% SAAR	6.2	3.8	8.4	4.0	3.3	3.5	4.2	3.9	4.7	4.4	4.2	4.3	9.1	6.2	4.3	4.3
Key Indicators																
Fed Funds Rate (midpoint, % EOP)	4.875	5.125	5.375	5.375	5.125	4.875	4.625	4.375	4.125	3.875	3.625	3.375	4.375	5.375	4.375	3.375
Industrial Production (% SAAR)	-0.3	0.8	2.0	-0.5	1.0	0.0	0.0	0.5	1.0	1.5	1.5	1.5	3.4	0.3	0.5	0.8
Capacity Utilization (%)	79.5	79.4	79.5	79.0	79.5	79.5	79.5	79.5	79.5	79.5	80.0	80.0	80.3	79.4	79.3	79.7
Nonfarm Payrolls (Avg mom ch, 000s)	312	201	221	150	100	75	75	100	100	125	125	150	399	221	88	125
Civilian Unemployment Rate (%)	3.5	3.5	3.7	3.8	3.8	4.0	4.1	4.2	4.2	4.2	4.1	4.1	3.6	3.6	4.0	4.2
Civilian Participation Rate (%)	62.5	62.6	62.7	62.8	62.9	62.9	62.9	62.9	62.9	62.8	62.8	62.8	62.2	62.6	62.9	62.8
Productivity (% SAAR)	-0.8	3.5	4.5	0.0	0.5	1.0	1.0	1.0	1.5	1.0	1.5	1.0	-1.9	1.8	0.9	1.3
Personal Saving Rate (%)	4.8	5.2	3.8	3.8	4.0	4.2	4.5	4.7	5.0	5.2	5.4	5.6	3.5	4.4	4.4	5.3
Light Vehicle Sales (Millions SAAR)	15.0	15.8	15.7	15.5	16.0	16.2	16.3	16.5	16.7	17.0	17.4	17.8	13.8	15.5	16.2	17.2
Housing Starts (Thous. SAAR)	1385	1450	1370	1485	1530	1520	1590	1645	1650	1665	1680	1690	1551	1425	1570	1670
Current Account (% of GDP)													-3.7	-3.6	-3.4	-3.3
US Budget Balance ($bn, Fiscal Year)													-1375	-1695	-1800	-1900
Inflation																
GDP Price Index (% SAAR)	3.9	1.7	3.3	2.5	2.3	2.4	2.7	2.3	2.6	2.3	2.2	2.3	7.1	3.7	2.5	2.4
% Change, Year Ago	5.3	3.5	3.2	2.9	2.5	2.6	2.5	2.4	2.5	2.5	2.4	2.4				
PCE Chain Prices (% SAAR)	4.2	2.5	2.9	1.9	2.0	2.3	2.3	2.0	2.4	2.0	1.8	1.9	6.5	3.8	2.2	2.1
% Change, Year Ago	5.0	3.9	3.4	2.9	2.3	2.3	2.1	2.1	2.3	2.2	2.0	2.0				
Core PCE Chain Prices (% SAAR)	5.0	3.7	2.4	2.1	2.6	2.5	2.5	2.3	2.5	2.2	2.0	2.0	5.2	4.1	2.5	2.3
% Change, Year Ago	4.8	4.6	3.9	3.3	2.7	2.4	2.4	2.5	2.4	2.4	2.2	2.2				
CPI, Consumer Prices (% SAAR)	3.8	2.7	3.6	2.8	2.2	2.5	2.6	2.0	2.5	2.1	2.8	2.4	8.0	4.1	2.6	2.4
% Change, Year Ago	5.8	4.0	3.6	3.2	2.8	2.8	2.5	2.3	2.4	2.3	2.4	2.5				
CPI ex Food & Energy (% SAAR)	5.0	4.7	2.8	3.4	3.3	3.1	2.9	2.7	2.6	2.6	2.5	2.4	6.1	4.8	3.2	2.7
% Change, Year Ago	5.6	5.2	4.4	4.0	3.6	3.1	3.2	3.0	2.8	2.7	2.6	2.5				

Source: BofA Global Research

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Rates and dollar forecast

Table 1: Rates and dollar forecast
We think the Fed is done hiking and will start cutting in March

	Spot	24-Mar	24-Jun	24-Sep	24-Dec	25-Mar	25-Jun	25-Sep	25-Dec
Interest rates									
Fed Funds	5.33	5.00-5.25	4.75-5.00	4.50-4.75	4.25-4.50	4.00-4.25	3.75-4.00	3.50-3.75	3.25-3.50
Fed Effective Rate	5.33	5.13	4.88	4.63	4.38	4.13	3.88	3.63	3.38
2-Year T-Note	4.26	4.75	4.50	4.25	4.00	-	-	-	3.75
5-Year T-Note	3.90	4.50	4.40	4.25	4.15	-	-	-	4.00
10-Year T-Note	3.98	4.40	4.30	4.25	4.25	-	-	-	4.25
30-Year T-Bond	4.18	4.70	4.65	4.65	4.75	-	-	-	4.75
Dollar									
EUR-USD	1.10	1.07	1.10	1.15	1.15	1.16	1.17	1.18	1.20
USD-JPY	145	155	150	146	142	140	138	136	136
USD-CAD	1.34	1.35	1.34	1.32	1.30	1.30	1.30	1.30	1.30
AUD-USD	0.67	0.66	0.68	0.71	0.71	0.71	0.71	0.71	0.71
NZD-USD	0.63	0.60	0.62	0.63	0.63	0.63	0.63	0.63	0.63
GBP-USD	1.28	1.23	1.26	1.31	1.31	1.33	1.34	1.37	1.40
USD-CHF	0.85	0.90	0.87	0.84	0.84	0.84	0.84	0.84	0.83
USD-SEK	10.25	10.93	10.36	9.74	9.65	9.57	9.40	9.24	9.00
USD-NOK	10.29	10.84	10.27	9.57	9.48	9.40	9.23	9.07	8.83
USD-CNY	7.16	7.55	7.40	7.10	6.90	6.90	6.80	6.80	6.70
USD-MXN	16.89	17.80	17.90	18.30	18.50	18.70	18.90	19.10	19.50

Source: BofA Global Research

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Rolling calendar of business indicators

Key economic data over the next three weeks
Next week the focus will be on retail sales, industrial production, and housing data

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 15	**Jan 16**	**Jan 17**	**Jan 18**	**Jan 19**
Martin Luther King Jr. Day	8:30 am: Empire Manufacturing – Jan	7:00 am: MBA Mortgage Applications – week ending 1/12/2024 8:30 am: Advance Retail Sales – Dec 8:30 am: Import Price Index – Dec 9:15 am: Industrial Production – Dec 10:00 am: NAHB Housing Index – Jan 10:00 am: Business Inventories - - Nov 2:00 pm: Fed's Beige Book	8:30 am: Initial Jobless Claims – week ending 1/13/2024 8:30 am: Housing Starts & Permits – Dec 8:30 am: Philly Fed – Jan	10:00 am: U. of Mich Sentiment – Jan (P) 10:00 am: Existing Home Sales – Dec
Jan 22	**Jan 23**	**Jan 24**	**Jan 25**	**Jan 26**
		7:00 am: MBA Mortgage Applications – week ending 1/19/2024 9:45 am: S&P Global US Manufacturing and Services PMI – Jan (P)	8:30 am: Initial Jobless Claims – week ending 1/20/2024 8:30 am: GDP - 4Q (A) 8:30 am: Durable Goods Orders – Dec (P) 8:30 am: Advance Goods Trade Balance – Dec 8:30 am: GDP - 4Q (A) 10:00 am: New Home Sales –Dec	8:30 am: Personal Income & Outlays – Dec 10:00 am: Pending Home Sales - Dec
Jan 29	**Jan 30**	**Jan 31**	**Feb 1**	**Feb 2**
	9:00 am: S&P CoreLogic CS HPI – Nov 10:00 am: Conference Board Confidence – Jan	7:00 am: MBA Mortgage Applications – week ending 1/26/2024 8:15 am: ADP Employment – Jan 8:30 am: Employment Cost Index - 4Q 9:45 am: Chicago PMI – Jan **2:00 pm: FOMC Rates Decision**	8:30 am: Initial Jobless Claims – week ending 1/27/2024 8:30 am: Productivity & Costs - 4Q (P) 9:45 am: S&P Global US Manufacturing PMI – Jan F 10:00 am: ISM manufacturing – Jan 10:00 am: Construction Spending – Dec All Day: Wards Auto Sales - Jan	8:30 am: Employment Report – Jan 10:00 am: Factory orders – Dec 10:00 am: U. of Mich Sentiment – Jan (F)

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

Source: Bloomberg

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CPI Forecast table

Exhibit 16: CPI monthly forecast table

We expect CPI inflation to moderate over the course of our forecast horizon given our expectations for restrictive monetary policy and a soft landing

	Non-seasonally Adjusted						Seasonally Adjusted									
	Headline CPI			Energy			Headline 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)
2022: Jan	281.15	0.8	7.5	260.65	1.7	27.0	282.60	0.6	7.6			286.79	0.6	6.1		
2022: Feb	283.72	0.9	7.9	267.77	2.7	25.6	284.61	0.7	8.0			288.15	0.5	6.4		
2022: Mar	287.50	1.3	8.5	298.25	11.4	32.0	287.47	1.0	8.5	9.2	8.0	289.05	0.3	6.5	6.7	6.3
2022: Apr	289.11	0.6	8.3	298.47	0.1	30.3	288.61	0.4	8.2			290.41	0.5	6.1		
2022: May	292.30	1.1	8.6	316.76	6.1	34.6	291.27	0.9	8.5			292.25	0.6	6.0		
2022: Jun	296.31	1.4	9.1	340.92	7.6	41.6	294.73	1.2	8.9	9.7	8.6	294.02	0.6	5.9	6.0	6.0
2022: Jul	296.28	0.0	8.5	325.41	-4.5	32.9	294.63	0.0	8.4			294.93	0.3	5.9		
2022: Aug	296.17	0.0	8.3	305.37	-6.2	23.8	295.32	0.2	8.2			296.64	0.6	6.3		
2022: Sep	296.81	0.2	8.2	297.34	-2.6	19.8	296.54	0.4	8.2	5.5	8.3	298.34	0.6	6.6	6.2	6.3
2022: Oct	298.01	0.4	7.7	300.36	1.0	17.6	297.99	0.5	7.8			299.33	0.3	6.3		
2022: Nov	297.71	-0.1	7.1	292.95	-2.5	13.1	298.60	0.2	7.1			300.26	0.3	6.0		
2022: Dec	296.80	-0.3	6.5	274.94	-6.1	7.3	298.99	0.1	6.4	4.2	7.1	301.46	0.4	5.7	5.1	6.0
2023: Jan	299.17	0.8	6.4	283.33	3.1	8.7	300.54	0.5	6.3			302.70	0.4	5.5		
2023: Feb	300.84	0.6	6.0	281.67	-0.6	5.2	301.65	0.4	6.0			304.07	0.5	5.5		
2023: Mar	301.84	0.3	5.0	279.08	-0.9	-6.4	301.81	0.1	5.0	3.8	5.8	305.24	0.4	5.6	5.0	5.6
2023: Apr	303.36	0.5	4.9	283.35	1.5	-5.1	302.92	0.4	5.0			306.49	0.4	5.5		
2023: May	304.13	0.3	4.0	279.82	-1.2	-11.7	303.29	0.1	4.1			307.82	0.4	5.3		
2023: Jun	305.11	0.3	3.0	283.85	1.4	-16.7	303.84	0.2	3.1	2.7	4.1	308.31	0.2	4.9	4.7	5.2
2023: Jul	305.69	0.2	3.2	284.83	0.3	-12.5	304.35	0.2	3.3			308.80	0.2	4.7		
2023: Aug	307.03	0.4	3.7	294.33	3.3	-3.6	306.27	0.6	3.7			309.66	0.3	4.4		
2023: Sep	307.79	0.2	3.7	296.00	0.6	-0.5	307.48	0.4	3.7	3.6	3.6	310.66	0.3	4.1	2.8	4.4
2023: Oct	307.67	0.0	3.2	286.75	-3.1	-4.5	307.62	0.0	3.2			311.37	0.2	4.0		
2023: Nov	307.05	-0.2	3.1	277.03	-3.4	-5.4	307.92	0.1	3.1			312.25	0.3	4.0		
2023: Dec	306.75	-0.1	3.4	269.38	-2.8	-2.0	308.85	0.3	3.3	2.8	3.2	313.22	0.3	3.9	3.4	4.0
2024: Jan	307.83	0.4	2.9	268.01	-0.5	-5.4	309.18	0.1	2.9			313.99	0.2	3.7		
2024: Feb	308.94	0.4	2.7	266.31	-0.6	-5.5	309.71	0.2	2.7			314.79	0.3	3.5		
2024: Mar	310.47	0.5	2.9	273.10	2.6	-2.1	310.43	0.2	2.9	2.2	2.8	315.63	0.3	3.4	3.3	3.6
2024: Apr	311.67	0.4	2.7	277.00	1.4	-2.2	311.15	0.2	2.7			316.42	0.2	3.2		
2024: May	312.45	0.3	2.7	280.11	1.1	0.1	311.51	0.1	2.7			317.21	0.2	3.0		
2024: Jun	313.94	0.5	2.9	286.97	2.4	1.1	312.51	0.3	2.9	2.5	2.8	318.00	0.2	3.1	3.1	3.1
2024: Jul	314.41	0.1	2.9	283.79	-1.1	-0.4	312.91	0.1	2.8			318.79	0.2	3.2		
2024: Aug	314.86	0.1	2.6	284.28	0.2	-3.4	313.98	0.3	2.5			319.52	0.2	3.2		
2024: Sep	314.70	-0.1	2.2	278.77	-1.9	-5.8	314.32	0.1	2.2	2.6	2.5	320.24	0.2	3.1	2.9	3.2
2024: Oct	314.77	0.0	2.3	273.79	-1.8	-4.5	314.65	0.1	2.3			320.94	0.2	3.1		
2024: Nov	314.25	-0.2	2.3	269.03	-1.7	-2.9	315.07	0.1	2.3			321.65	0.2	3.0		
2024: Dec	313.94	-0.1	2.3	266.07	-1.1	-1.2	316.10	0.3	2.3	2.0	2.3	322.35	0.2	2.9	2.7	3.0
2025: Jan	315.36	0.5	2.4	269.90	1.4	0.7	316.76	0.2	2.5			323.05	0.2	2.9		
2025: Feb	316.42	0.3	2.4	268.72	-0.4	0.9	317.22	0.1	2.4			323.74	0.2	2.8		
2025: Mar	317.82	0.4	2.4	275.19	2.4	0.8	317.75	0.2	2.4	2.5	2.4	324.44	0.2	2.8	2.6	2.8
2025: Apr	318.91	0.3	2.3	279.02	1.4	0.7	318.36	0.2	2.3			325.12	0.2	2.7		
2025: May	319.64	0.2	2.3	282.89	1.4	1.0	318.67	0.1	2.3			325.80	0.2	2.7		
2025: Jun	321.15	0.5	2.3	291.13	2.9	1.4	319.67	0.3	2.3	2.1	2.3	326.48	0.2	2.7	2.6	2.7
2025: Jul	321.67	0.2	2.3	290.27	-0.3	2.3	320.11	0.1	2.3			327.15	0.2	2.6		
2025: Aug	322.28	0.2	2.4	293.52	1.1	3.3	321.37	0.4	2.4			327.82	0.2	2.6		
2025: Sep	322.25	0.0	2.4	290.46	-1.0	4.2	321.86	0.2	2.4	2.8	2.4	328.49	0.2	2.6	2.5	2.6
2025: Oct	322.42	0.1	2.4	287.35	-1.1	5.0	322.30	0.1	2.4			329.15	0.2	2.6		
2025: Nov	322.00	-0.1	2.5	284.55	-1.0	5.8	322.84	0.2	2.5			329.81	0.2	2.5		
2025: Dec	321.77	-0.1	2.5	283.12	-0.5	6.4	323.98	0.4	2.5	2.4	2.5	330.47	0.2	2.5	2.4	2.5

Source: Bureau of Labor Statistics, BofA Global Research

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Disclosures

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