

US Rates Watch

10 FAQs ahead of CPI

Asked & answered

In this note we go through 10 frequently asked questions around inflation, inflation markets, and oil as we look ahead to CPI. Our 3 main takeaways for inflation markets: 1-we continue to see room for real yield curve to steepen as Fed cuts to lower trough, 2-1y inflation swaps look cheap vs oil prices and may be vulnerable to strong CPI data, 3-5y TIPS remain historically cheap vs swaps and flow dynamics can support correction.

Expectations are clustered

The BofA US Economics Team expects core MoM CPI to come in around 0.3% tomorrow, consistent with Bloomberg survey consensus and close to levels implied by swaps. A downside miss could see the market price greater conviction in a March cut and lower trough, while an upside miss would likely see the curve flatten as near-term cuts are priced out. Scenario analysis over the last year suggests the rates market has responded more to downside misses.

Details matter

The translation of the CPI data to the Fed's preferred measure of inflation, PCE will be what matters most to the markets and Fed policy. Composition also matters when judging whether we are on a path to persistent price stability. Much of the disinflation in recent months has been driven by deflation in core goods prices, which, in our view, is unlikely the primary result of tighter Fed policy.

Oil fundamentals expected to stay challenging

We recently reduced our 2024 Brent crude oil price forecast to \$80/bbl from \$90/bbl and believe Saudi Arabia will need to maintain its production cuts for the entirety of 2024 to keep the market balanced. That said, geopolitics have shown no signs of deescalating, so the market will likely remain on edge. The front end of the inflation curve has moved more since the December FOMC meeting than oil prices would imply, suggesting a vulnerability if tomorrow's data beats.

Improving flow dynamics may compress TIPS iotas

Inflation fund outflows are showing tentative signs of slowing. More two-way flows can help support 5y TIPS sector which still looks cheap historically vs swaps. Pulling forward of market expectations for end of Fed QT and start of MBS rollovers into UST purchases can also be quite supportive for TIPS. We anticipate the divergence between TIPS % issuance and TIPS % outstanding to be in play again in 2H '24 as it was when Fed was buying in 2020-2022.

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UST= US Treasury

TIPS = Treasury Inflation Protected Security

OPEC = Organization of the Petroleum Exporting Countries

QT = quantitative tightening

QE = quantitative easing

MoM = month over month

CPI = Consumer Price Index

PCE = personal consumption expenditure

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10 Qs ahead of CPI

What is our forecast for tomorrow's print?

As discussed in <u>CPI Inflation Watch</u>, our US Economics Team expects both headline and core CPI rose by 0.3% m/m (0.26% m/m and 0.27% m/m, respectively). Within core, our economists expect goods and services to continue to paint two different pictures. On the one hand, core goods prices are expected to decline for a seventh consecutive month (-0.2% m/m), owing in part to a decline in used cars and trucks. On the other hand, core services prices are expected to increase at 0.4% m/m or 5.0% annualized over the last three-months owing in large part to sticky rents.

How do we expect the rates market to respond to an upside vs downside surprise?

Expectations are generally aligned around where CPI will print tomorrow (Exhibit 1). A downside miss could see the market price greater conviction in a March cut and lower trough, while an upside miss would see the curve flatten as near-term cuts are priced out (Exhibit 2).

Exhibit 1: MoM SA CPI expectations

Expectations are generally aligned

	Headline	Core
BofA Base	0.3	0.3
BBG Consensus	0.2	0.3
Market Pricing	0.3	-
Source: BofA Global Research, Bloomberg		
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Exhibit 2: Market scenario analysis

Anticipate market to price greater conviction in March cut and lower trough if CPI disappoints but fewer cuts and flatter curve on a beat

Core CPI MoM	March pricing	10y impact	2s10s impact
	0.1 25bps of cuts	-15bps	5-10bps steeper
	0.2 18-25bps of cuts	-10bps	5bps steeper
	0.3 10-18bps of cuts	within 5bps	within 5bps
	0.4 5-10bps of cuts	+10bps	5bps flatter

Source: BofA Global Research, Bloomberg

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2H 23 saw more downside CPI surprises vs 1H 23 (Exhibit 3). 2y rates rallied 13-20bps for a 0.1% downside miss (Exhibit 4). Over 2023, the average move in 2y and 10y rates was larger on misses vs beats (Exhibit 5). Steepening on downside surprises though has been relatively muted vs flattening on upside surprises (Exhibit 6).

Exhibit 3: Market response to CPI surprises in 2023

Market has remained sensitive to larger CPI surprises

Surprise in MoM					
Release date	Core	2y change	10y change	2y10y change	
1/12/2023	0.1%	-7	-10	-2	
2/14/2023	0.0%	10	4	-5	
3/14/2023	0.1%	27	12	-16	
4/12/2023	0.0%	-6	-4	2	
5/10/2023	0.0%	-11	-8	4	
6/13/2023	0.0%	9	8	-1	
7/12/2023	-0.1%	-13	-11	2	
8/10/2023	0.0%	3	10	6	
9/13/2023	0.1%	-5	-3	2	
10/12/2023	0.0%	9	14	5	
11/14/2023	-0.1%	-20	-19	1	
12/12/2023	0.0%	2	-3	-5	

Source: BofA Global Research, Bloomberg, Note: surprise implied from core SA MoM expectation vs realized rounded to 1 decimal place

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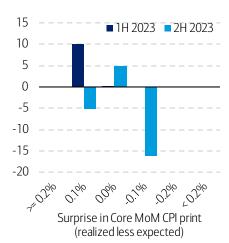
We think the market response to tomorrow's print is roughly symmetric to partially skewed to a larger response on a downside miss. A decent downside miss particularly stemming from factors that carry large weights in PCE could drive the market to price closer to 20-25bps of cuts in March and support expectations for a lower terminal rate. A modestly sized beat would argue for a slower pace of cuts vs what is priced and could challenge March pricing. However, given the scale of progress already made on inflation and notable dovish shift from the Fed, the market may be hard pressed to price in fewer than 125bps of cuts over 2024.



2

Overall, positioning in our view is cleaner vs what we have observed over 2023 (see: <u>UST Flows report</u>). Specifically, CTAs (Commodity trading advisors) are likely neutral to long the front end and have more balanced curve views vs the last several months.

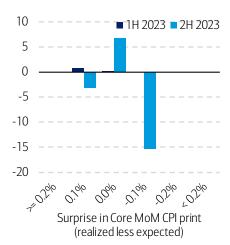
Exhibit 4: 2y change on CPI surprise (BPS)Downside surprises have had larger reaction on average



Source: BofA Global Research, Bloomberg

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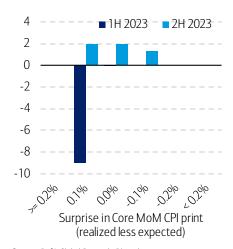
Exhibit 5: 10y change in CPI surprise (BPS)Downside surprises have had larger reaction on average



Source: BofA Global Research, Bloomberg

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Exhibit 6: 2y10y change on CPI surpriseSteepening on downside surprises has been relatively muted vs flattening on upside surprises



Source: BofA Global Research, Bloomberg

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Is the Fed focused on any specific sub-components still or just the broader data?

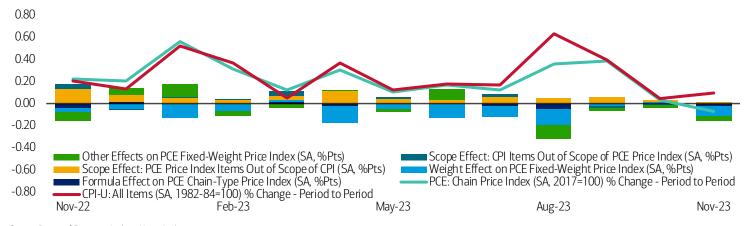
Our economists do think composition matters when judging whether we are on a path to persistent price stability. Much of the disinflation in recent months has been driven by deflation in core goods prices, which, in our view, is unlikely the primary result of tighter Fed policy. Therefore, it is something that the Fed should not rely on to continue. Meanwhile, inflation for both shelter and core services ex housing services have shown some progress, but the current run-rates remain above pre-pandemic levels. That said, with inflation so close to target—and at target depending on what time frame of core PCE one looks at—the composition of inflation will continue to be deemphasized by Fed participants.

How are we thinking about the components that translate to PCE?

The translation of the CPI data to the Fed's preferred measure of inflation, PCE will be what matters most to the markets and Fed policy. While data from the CPI report are the primary price series used in the calculation of PCE inflation, a significant portion of PCE inflation uses PPI (producer price index) measures of prices or other methods to estimate prices. Moreover, there are differences in scope and weighting between the two measures of inflation. Due to these differences the two measures of inflation do not always send the same signal.

Exhibit 7: Factors that explain the Wedge between % m/m changes in Headline CPI and PCE inflation (ppt)

In the last six months there has been a larger divergence in monthly measures of inflation owing largely to different weights and other effects which include seasonal adjustment differences



Source: Bureau of Economic Analysis, Haver Analytics

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Indeed, as we saw last month, it's entirely possible to have a relatively firm core CPI print (0.28% m/m) but a soft core PCE inflation print (0.07% m/m). This divergence was mostly a result in the differences in weights between the two inflation measures. PCE inflation has a higher weight on healthcare services and a lower weight on Housing services (rent and OER) than CPI. Therefore, any knee-jerk market reaction to the CPI report could be reversed depending on what the detailed numbers mean for PCE.

What has driven oil lower and are we due for a correction?

Brent crude oil rallied to nearly \$94/bbl in October, as Hamas' attack on Israel and escalating conflict in the region fanned oil supply disruption fears. Yet, oil trade has continued mostly uninterrupted since then, and the market has refocused its attention on oil fundamentals, which have deteriorated. Rising inventories, soaring US shale production, and a slowing economic backdrop forced OPEC+ to announce an additional 2.2mn b/d of supply cuts in November, but these expanded supply cuts were met with skepticism due to expectations for low compliance and difficulty monitoring Russian exports. Oil prices continued to sell off and bottomed near \$72/bbl in mid-December, coinciding with multi-year low managed money net length (spec length) in the WTI and Brent contracts. Prices have rebounded since then on continued geopolitical tensions, but soft fundamentals continue to weigh on the petroleum complex.

What do we expect for the spread between oil and gasoline this year?

We recently reduced our 2024 Brent crude oil price forecast to \$80/bbl from \$90/bbl and believe Saudi Arabia will need to maintain its production cuts for the entirety of 2024 to keep the market balanced (See Can (geo)politics Trump fundamentals?). That said, geopolitics have shown no signs of de-escalating, so the market will likely remain on edge. Current low petroleum inventories, low spec net length, and heightened supply disruption risk leave oil prone to volatile upward price moves this year. Meanwhile, 1.45mn b/d of new refinery starts globally should help meet rising gasoline demand this year, grounding RBOB-Brent spreads (gasoline vs crude oil). However, the potential for startup delays, especially at larger plants like Nigeria's 650k b/d Dangote refinery, create upside risk to our view that spreads between gasoline and crude oil will remain relatively narrow.

How are we assessing the inflation and real rate curves?

One of our preferred curve expressions remains the 5s10s real yield steepener (see: Inflation Strategist). As shown in Exhibit 11, the real yield curve is still historically flat while the inflation curve is upward sloping. We think the real yield curve can continue to



steepen as expectations build for the Fed cutting to a more accommodative rate vs what is implied in longer term forwards.

We also see flattening pressure more possible on inflation curves given how low the front end is priced vs where our economists expect CPI to print. As shown in Exhibit 12, front-end inflation swaps have compressed alongside the sharp decline in oil prices, but recent moves have been outsized. Since the December FOMC meeting the 1y inflation swap fell 10bps while the implied beta to oil prices would suggest a 10bps rally. The front end of the inflation curve therefore stands out as vulnerable on a CPI beat.

Exhibit 8: 2y10y real rate and inflation swap curves

Real rate curve still deeply inverted while inflation curve is upward sloping



Exhibit 9: Oil and 1y inflation swap

Front-end of the inflation curve has compressed more than what would be implied from oil prices alone



Source: BofA Global Research, Bloomberg

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What would make us want to turn long breakevens?

Three factors that can prove more supportive for breakevens in our view are:

- **1- Higher oil prices:** Breakevens have fallen notably alongside oil prices in recent months. An improvement in oil market dynamics would make us more optimistic but as discussed above fundamentals remain soft.
- 2- Reignition in subcomponents: Our economists expect this print to continue to reflect a divergence between goods and services, with rents remaining elevated but goods deflationary. A print that confirms that it will take longer for the decline in rents to pass through to the index could support market pricing for inflation at the very front-end (over the next coming months) but keeps disinflation still in the pipeline. We would likely need to see signs resurgence in components which we previously thought were moderating like goods and services ex-shelter to revise the forward inflation path higher.
- 3- Easy financial conditions: Breakevens should be more supported by conviction in soft landing outcomes, where real rates fall as the Fed cuts but risky assets stay supported alongside growth. This dynamic could be amplified if the wedge between core PCE and CPI widens, with PCE falling faster vs CPI. Quicker normalization in PCE that guides the Fed to cut but sticker CPI could allow for wider breakevens alongside lower real rates.

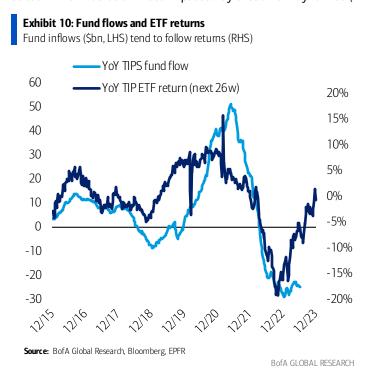
What flows are important for TIPS valuation?

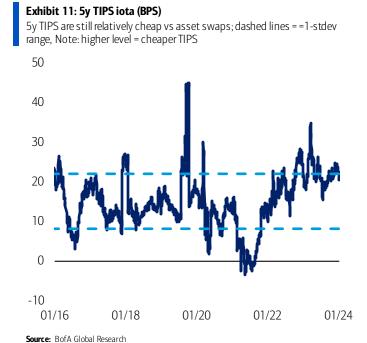
Since the start of the pandemic, the two important buyers in the TIPS market that have driven cash market valuations are the Fed and inflation funds. TIPS funds have observed



persistent outflows since the end of 2022 which followed the peak in realized inflation and negative ETF returns (Exhibit 13).

With returns now recovering and AUM back to early 2021 levels, this suggests that fund flows may become more two way. This should be more supportive for TIPS in the 2-5y sector which has been most impacted by these flow dynamics (Exhibit 14).





How might an earlier end to QT impact the TIPS market?

As discussed in <u>Logan and QT: QT taper now in March</u>, Lorie Logan's speech on Saturday supports an early slowing of Fed QT in March and endorses our view that QT will end in July. A tapering of QT does not impact our coupon supply forecasts, including for TIPS.

However, market recalibrating expectations for an earlier end of QT (given NY Fed survey suggesting market expectations for end '24/ early '25 as of December) can pull forward the timing of when the Fed may be back buying USTs in the secondary market. We anticipate that the Fed will look to hold primarily USTs on the balance sheet and will reinvest MBS paydowns into the UST market through purchases. This is consistent with Fed's previous guidance in 2019.

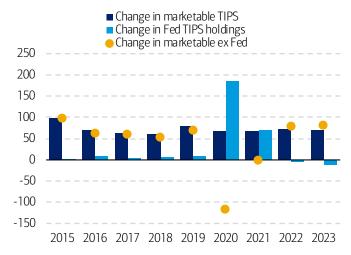
In implementing these purchases, the Fed would most likely buy consistent with composition of outstanding USTs. When the Fed was buying most recently, difference in composition of Fed purchases vs issuance allowed net TIPS supply to be deeply negative to flat in 2020 and 2021 (Exhibit 15). This was driven by TIPS % outstanding debt > TIPS % issuance. While UST has increased TIPS issuance to help correct this imbalance, it may again be at play in 2H '24, when the Fed could be back in the UST market (Exhibit 16).



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Exhibit 12: Change in marketable TIPS supply ex Fed (\$bn)

When Fed was buying in the market, net TIPS supply was particularly negative

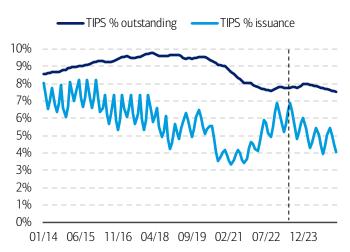


Source: BofA Global Research, Bloomberg, US Treasury, Federal Reserve, Note: levels exclude inflation accrual

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Exhibit 13: TIPS as % of issuance and outstanding debt

TIPS as % of issuance is still lower than TIPS as % of outstanding and may diverge over time



Source: BofA Global Research, Bloomberg, US Treasury, Federal Reserve, Note: levels exclude inflation accrual, values after dashed line are projected from BofA supply forecasts

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A Fed buying in the secondary UST market could have an outsized impact on TIPS if this divergence between issuance and outstanding is realized. While Fed purchases are unlikely to have the same richening effect as observed in 2020-2021 (Exhibit 14) given the likely smaller scale, potential Fed buying is another argument for tighter iotas alongside stabilizing fund flows.



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