US Viewpoint

Feb CPI FAQ

11 March 2024

United States

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February print should keep June cut on the table

We expect core and headline SA CPI to print at 0.3% and 0.4%, respectively. This is in line with Bloomberg consensus but below market pricing. The Fed will likely be playing close attention to the composition, particularly services, to gauge confidence on the disinflation trend persisting. A print as we forecast should keep a June cut on the table. Clients who think that there is upside risk to a firmer print may prefer expressions in nominal rates versus inflation markets.

Reduce risk in 2y inflation long

We recommend that clients who have been long front-end inflation reduce exposure ahead of the CPI print (for details, see inside). The market is pricing a firmer print than we and Bloomberg consensus expect, and we see risks that a disappointment could drive market pricing materially lower. Technical factors also support a topping out of our 2-year (2y) inflation swap around current levels. However, our conviction that services inflation will be slower to moderate versus market pricing and upside commodity risks suggest maintaining long positions without hedging energy exposure for a longer time horizon.

Commodity upside risk

Fundamental and technical factors suggest that inflation longs should be expressed without an energy hedge. Besides geopolitical risks, we see three factors that could strengthen gasoline and diesel cracks and prices into 2Q24: 1- inventories are at seasonal lows, 2-gasoline may become more expensive due to blending components, 3-global manufacturing is moving back into expansion territory. From a technical perspective, broad market commodities double bottomed in February, and the move higher broke away from the downtrend. The Bloomberg Commodity Index may be a leading indication that oil and/or copper could break higher soon.

Shelter moderation may be slow-moving process

Shelter inflation has been a big focal point for the market. In this note, we answer many technical questions about the OER/rent wedge and discuss why the January strength across many service components may be more noise than signal. We expect February inflation to be a little less firm than January, as effects that biased January higher should not have as much of an effect in February. However, we still expect the positive wedge between OER and rent to persist this year and think that services inflation moderation is likely to be slower than the market expects.

BCOM = Bloomberg Commodity Index

CPI = Consumer Price Index

MoM = month over month

NSA = not seasonally adjusted

OER = Owners' equivalent rent

OPEC = Organization of the Petroleum Exporting Countries

SA = seasonally adjusted

TIPS = Treasury Inflation Protected Security

For a list of our open trades and those closed over the last 12 months, see the latest Global Rates Weekly

Timestamp: 11 March 2024 09:43AM EDT

Pre-CPI FAQs

What do we expect from tomorrow's CPI print?

The February CPI report should alleviate concerns that inflation is reaccelerating after the January data (see the report, February US CPI Inflation preview). While we forecast that headline inflation accelerated to 0.4% (0.42% unrounded), we expect a deceleration in core inflation to 0.3% (0.31% unrounded). This would result in y/y headline inflation remaining at 3.1% and a two-tenth decline in core inflation to 3.7%. This is in line with Bloomberg consensus but below market pricing (Exhibit 1).

Exhibit 1: MoM SA CPI expectations
Market pricing is above BofA and Bloomberg consensus

	Headline	Core	NSA Index
BofA base	0.4	0.3	310.312
BBG consensus	0.4	0.3	310.304
Market pricing	0.5	0.4	310.395

Source: BofA Global Research, Bloomberg

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OER inflation likely to moderate after noisy January

We expect the declaration in core inflation to be driven in part by a moderation in owners' equivalent rent inflation (OER). Last month's acceleration in OER inflation was a key reason for the upside surprise to inflation overall. Indeed, OER inflation exceeded rent inflation by an atypically large 20bp in January. We judge this difference to be more noise than signal, as we discuss in greater detail below. The gap between the two measures should narrow this month, owing mostly to a deceleration in OER inflation.

Services inflation to remain a source of stickiness

Though we look for OER inflation and, in turn, shelter inflation to moderate in February, core services inflation should remain sticky high. Indeed, we expect core services inflation to print at 0.5% m/m. This would be a step down from the 0.7% m/m print in January but would still exceed pre-pandemic run rates. Core goods price, on the other hand, should continue to decline, owing in large part to declines in auto prices.

Exhibit 2: CPI inflation forecast summary
We expect core CPI inflation to moderate in February

	% m/m February Forecast	% m/m Previous month
Headline NSA Index (level)	**310.312**	**308.417**
Headline CPI (All Items)	**0.42%**	**0.31%**
Food	0.2%	0.4%
Energy	2.2%	-0.9%
Core CPI	**0.31%**	**0.39%**
Core goods	**-0.20%**	**-0.32%**
Core Services	**0.46%**	**0.66%**
Shelter	0.5%	0.6%
Of which:		
Rent	0.4%	0.4%
OER	0.4%	0.6%

Source: BLS, BofA Global Research

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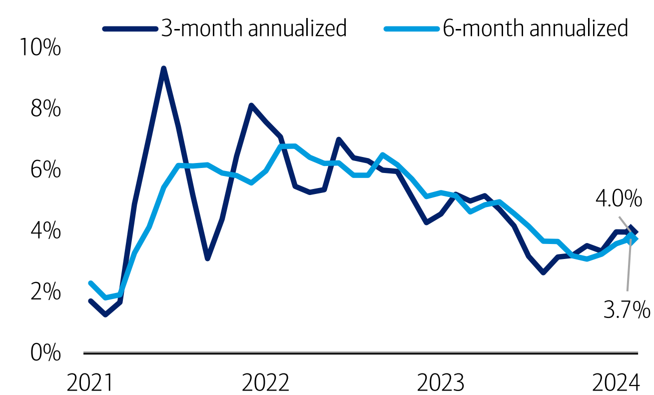
Exhibit 3: Core CPI inflation with February forecast
Core CPI inflation has firmed in recent months



Source: BLS, BofA Global Research

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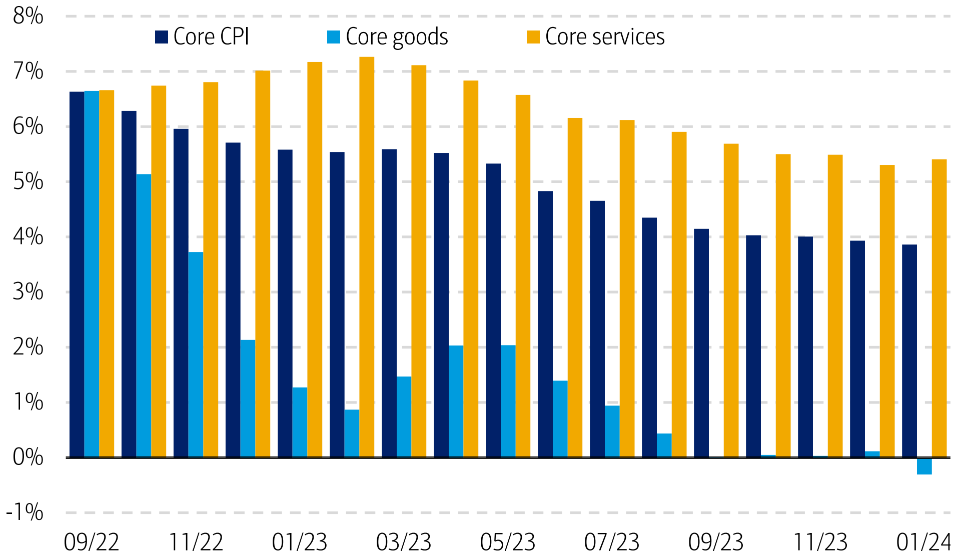
Does this push out timing of first Fed cut?

Overall, a report in line with our expectations would keep the Fed on track to begin cutting rates at its June meeting. However, the data print will be an important factor in determining Fed confidence in inflation continuing to moderate.

In our forecasts, we show still strong core services inflation at 0.5% MoM, well above its pre-pandemic run rate. Data that shows continued strength in this subcomponent can push back on Fed conviction that disinflation can continue once goods prices are no longer a drag on the index (Exhibit 4).

Exhibit 4: YoY Core CPI
Services inflation has been sticky high, while core goods has led a moderation in core basket



Source: BofA Global Research, Haver

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Is there any asymmetry in expected market response?

Market pricing of inflation swaps is above our house view and consensus which suggests a larger price response to a miss versus beat to our baseline forest. At the same time, the nominal market has gone back to pricing 95bps of cuts this year, a level that would likely be challenged if data confirms a 0.4% MoM core print as swaps suggest. Investors who want to set up for a beat on CPI this week may therefore prefer expressions in nominals versus inflation markets. As discussed in more detail below, we hold our 2y inflation swap long position but recommend lightening up on risk ahead of the print.

Exhibit 5: Market scenario analysis
We expect market to price greater conviction in May cut and lower trough if CPI disappoints but fewer cuts and flatter curve on a beat

Core CPI MoM	2024 cuts	10-year impact	2s10s impact
0.2	100-125bps of cuts	-10bps	5bps steeper
0.3	90-100bps of cuts	within 5bps	within 5bps
0.4	70-90bps of cuts	+10bps	5bps flatter

Source: BofA Global Research

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What do technical factors suggest for inflation market?

Previously, the 2y inflation swap that we recommended at 2.20% formed a head and shoulders base that estimated upside to 2.45%. This was reached, and now momentum and trend indicators are mean reverting. While the trend has been up, the risk is that the 2y inflation swap peaked and may mean revert (Chart 1). However, broad market commodities double bottomed in February, and the move higher broke away from the downtrend. Oil prices have been rising since December, and copper prices have been rising since October (Chart 2). The BCOM index may be a leading indication that oil and/or copper could break higher soon. This could support the US 2y inflation swap.

Friday's unstained intra-day decline post payrolls, support from the 200-day (200d) simple moving average (SMA) at 2.35% and the broad market commodity index rising are optimistic signals that the US 2y inflation swap may consolidate into CPI and then have another leg higher. For those holding a long, raising the stop to 2.35% could be worthwhile given that relative strength index (RSI) and moving average convergence/divergence (MACD) are mean reverting.

Chart 1: US 2y inflation swap rate – daily chart

Head and shoulders target reached. Key trend line being tested as oscillators turn down to signal a peak and risk of mean reversion.

Source: BofA Global Research, Bloomberg

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Chart 2: Bloomberg Commodities index (Top), Brent oil (middle), Copper (bottom) – daily chart

BCOM double bottomed in February and broke higher after. This may be a leading indicator that oil and copper could break higher soon.

Source: BofA Global Research, Bloomberg

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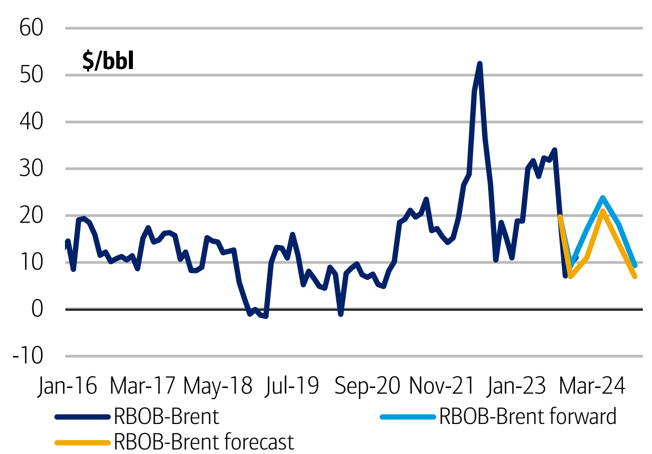
What upside risks do gasoline prices face other than geopolitical escalation?

As the US driving season approaches, 2Q24 gasoline cracks are trading slightly above our October 2023 forecast, and we see three factors that could further strengthen gasoline and diesel cracks and prices into 2Q24. First, unplanned refinery outages in the Midwest, USGC, and Northeast and planned refinery maintenance have left US gasoline and diesel inventories near seasonal lows. Second, high octane blending components necessary for summer grade gasoline blends are unseasonably expensive, suggesting that it is already challenging to make summer fuels even as seasonal demand is still ramping up. Third, global manufacturing activity has bottomed and is now moving back into expansion territory, which should support diesel demand growth.

The refining system is highly flexible and can adjust to changing demand patterns by raising or lowering plant utilization rates and flexing refinery yields in favor of certain products. We expect refiners to run near maximum capacity this spring and summer in the US, but refiners may find it challenging to adequately supply gasoline and replenish diesel inventories, especially if an incipient manufacturing rebound speeds up in the midst of another strong summer travel season. In such a scenario, a battle for yield may ensue, pushing gasoline and diesel cracks (and refining margins) higher in the process.

Exhibit 6: NYH RBOB – Brent crack history, forecast, and forward curve
2Q24 gasoline cracks are trading slightly above our October 2023 forecast, but several factors could push gasoline cracks and prices higher into summer



Source: Bloomberg, BofA Global Research estimates

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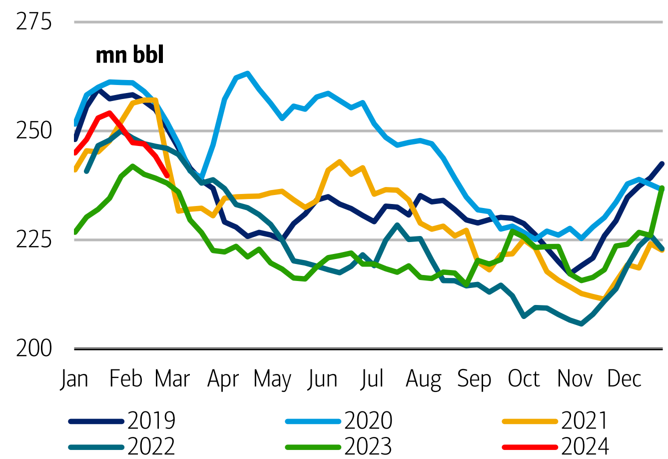
Exhibit 7: US gasoline inventories
US gasoline inventories have fallen toward the low end of the five-year range due in part to unplanned outages



Source: Bloomberg

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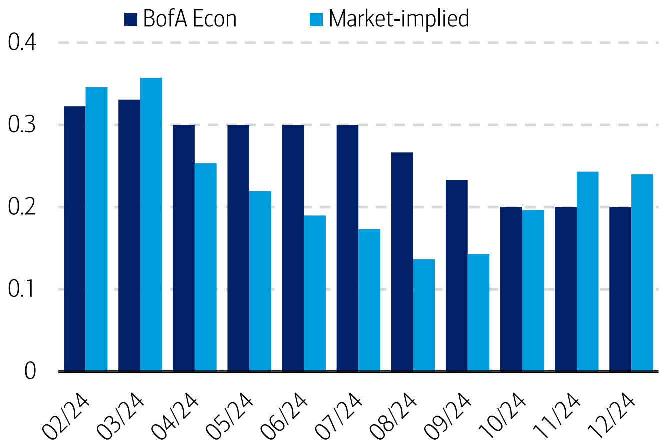
Do we recommend holding long inflation positions into CPI print?

We recommend lightening up on existing long inflation positions into this week's CPI print. While we still believe that there is upside potential to our 2y inflation swap position, a print that comes in below our house view could see a meaningful repricing lower in front-end swap positions.

As discussed above, market pricing for the February print is above our base case, and so we see downside risks to inflation longs. In our Risks to Market's downhill CPI path report, we recommended being long 2y inflation swap at 2.20% (current 2.41%, target = 2.60%, stop = 1.90%), and we would reduce risk in the position ahead of this week's CPI print. Technical factors also suggest limited further upside potential. However, we do still see room for front-end swaps to rally from a core and headline perspective. Risk to the trade is downside shock to growth and or commodities.

While our forecasts for core CPI are modestly below the market near term, we are more meaningfully above the market from Q2 into Q3 (Exhibit 8). As discussed above, from a fundamental commodities and technical perspective, there is upside risk to inflation pricing from non-core components. We hold risk in the 2y inflation swap long but recommend that investors who have been long reduce exposure.

Exhibit 8: SA MoM implied core CPI, rolling 3-month average
Upside to market-implied inflation in middle of this year



Source: BofA Global Research

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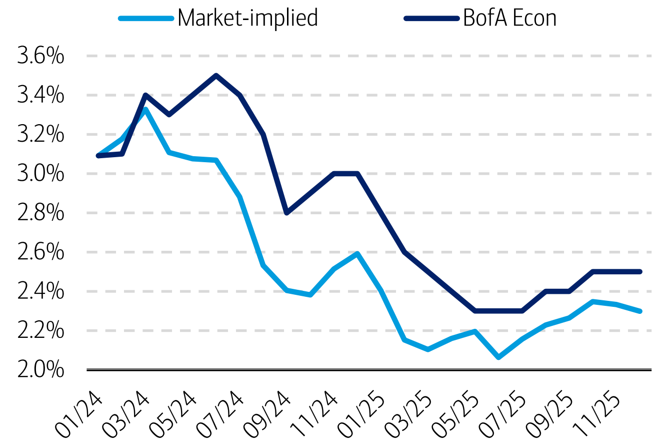
Exhibit 9: YoY expected CPI
Economic forecasts are notably above market over next 2 years



Source: BofA Global Research

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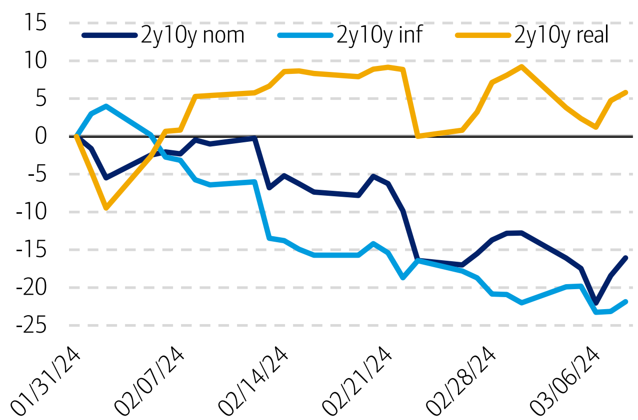
What curve trades do we like?

The nominal yield curve has flattened since the January Federal Open Market Committee (FOMC) meeting, where Powell pushed back on March rate cuts. Much of this flattening, however, has been concentrated in the inflation curve (Exhibit 10). Potential inflation curve flattening has been a dynamic we have been highlighting given the relative steepness of the inflation versus the real rate curve at the start of the year (see our report, Face front).

Exhibit 10: Cumulative change in swap curves since January FOMC
Flattening has been driven by inflation curve



Source: BofA Global Research, Bloomberg

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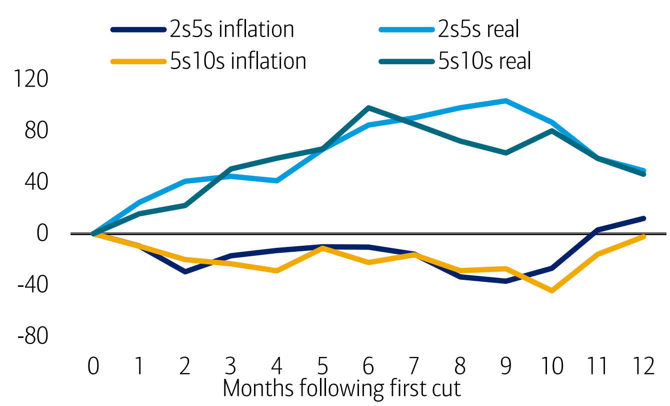
Exhibit 11: Real & inflation curves after first cut in 2007 (BPS)
Real yield curves initially steepened. while inflation curves flattened 12 months after first cut



Source: BofA Global Research, Bloomberg, Note: TIPS and UST curves used

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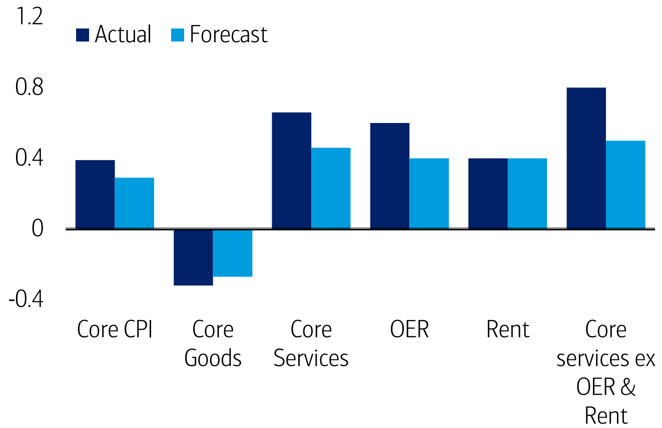
While steeper curve trades have been under pressure in recent weeks, we continue to favour real rate steepeners, which have been insulated from recent curve flattening. We hold our 5s10s recommendation: current level = 5bp (initiation = -6bps), target = 50bps, stop = -40bps. Real yield steepeners can perform in softer landing outcomes and led the steepening as the Fed delivered cuts in 2007 (Exhibit 11). Risk to the trade is a flight-to-quality event that sees energy prices decline sharply and market illiquidity rise.

What drove the acceleration in January?

Relative to our January expectations, core CPI inflation came in 10bps above our expectations (Exhibit 12). There were two key sources behind this upside surprise, in our view. (1) The acceleration in OER inflation and its divergence with rent (Exhibit 13). (2) The January effect—seasonal adjustment failing to accurately account for price increases to start the year for components of services ex rent and OER. In February, we expect OER inflation to moderate, partially closing the gap with rent inflation, and expect seasonality to be less of a source of upward pressure.

Exhibit 12: January % m/m CPI: actual versus our forecast (%)
Firmer core services inflation, both OER and core services ex rent and OER topped our expectations in January



Source: BLS, BofA Global Research

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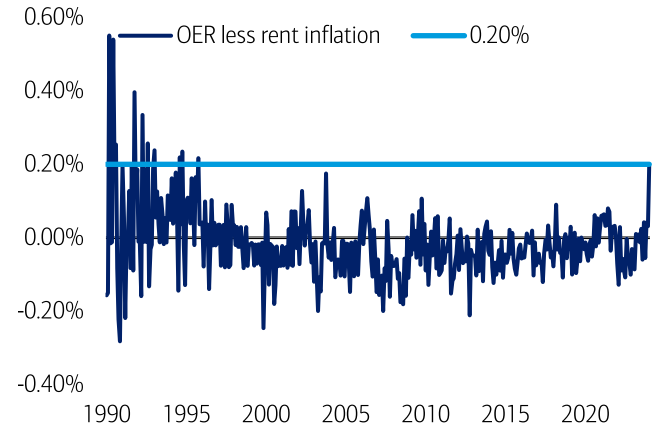
Exhibit 13: OER less rent inflation (% m/m)
OER inflation was roughly 20bps higher than rent inflation in January, which is a rare occurrence



Source: BLS, BofA Global Research

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Why has there been so much focus on rent and OER?

The divergence between OER and rent inflation seen in January has been under the microscope in recent weeks for a few reasons.

- First, the two measures are constructed using the same sample and are both based on rents. Therefore, it is rare historically to see such a large divergence.
- Second, the Bureau of Labor Statistics (BLS) issued communication over the past two weeks on the issue. The communication ultimately resulted in a webinar by BLS to help explain the source of the divergence between the two measures.

Following the webinar, we do think that there is a high likelihood that OER inflation will exceed rent inflation more often moving forward. However, we think that much of the 20bp divergence was noise and not signal. Rent and OER inflation should continue to moderate over the course of this year, helping to drive core inflation lower as goods price deflation dissipates.

Does a change in OER weights matter?

In 2020, the BLS published a working paper that found that the BLS housing survey did not accurately represent the structure types of owned homes. Its sample was underweighting the share of single-family detached homes in the calculation of the OER index. Based on these findings, the BLS began updating its weighting method for OER based on structure types in January 2023.

According to the BLS, the share of single-family detached homes in the OER index increased by 9%. Despite this, OER inflation was 5bp below rent inflation in January 2023. This January, the increase in the share of single-family detached homes was significant but smaller at 5%.

For the weight increase to fully explain the 20bp divergence between the two rent measures, monthly rent inflation for single-family detached homes would need to have been roughly 4% higher than all other rental units. This is hard to fathom.

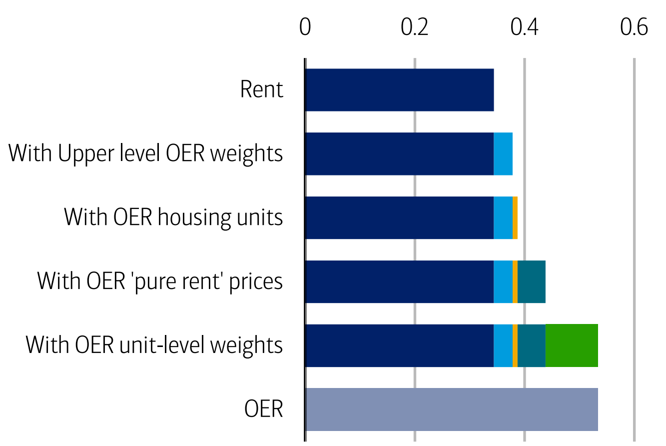
Analysis from the BLS also seemed to discount the role that the weight increase played in the divergence of the two series. In its webinar, the BLS produced two ways of decomposing the divergence.

1. First approach: Starting with rent inflation, it decomposed the gap into four sources: 1) Upper-level OER weights – weights used in the aggregation of area measures, 2) OER housing units – controlling for different samples, 3) OER pure rents – controlling for different rent calculation[i], and 4) OER unit-level weights – different weighting for structure types. This approach showed that OER unit-level weights might have accounted for 10bp of the divergence between rent and OER (Exhibit 14).

2. Second approach: In a second approach, the BLS isolated the role that single-family detached units played. First, it calculated rent and OER without single-family detached units. Then it calculated rent and OER without the structure type adjustment. Excluding the structure-type adjustment accounted for only 0.9bp of the difference between the two series, while excluding single-family detached from the calculation accounted for 5.2bps of the difference (Exhibit 15).

The upshot of both approaches is that the increase in the weight of single-family detached homes did not fully explain the divergence. Therefore, other factors, such as sampling and statistical noise, likely played a role. Monthly data is inherently noisy.

Exhibit 14: Decomposition of Rent and OER January % m/m inflation
Unit-level weight differences help explain a large portion of the difference between OER and rent inflation seen in January



Source: BLS

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Exhibit 15: Single-family detached impact on 1-month price change
The increase in the weight of single-family detached units does not appear to have been the main driver of the difference in OER and rent inflation

	OER	Rent	Diff. (OER less rent)	Diff. v official diff.
As reported	0.533	0.344	0.189	
Without single-family detached units	0.472	0.335	0.137	-0.052
Without structure type adjustment	0.524	0.344	0.180	-0.009

Source: BLS

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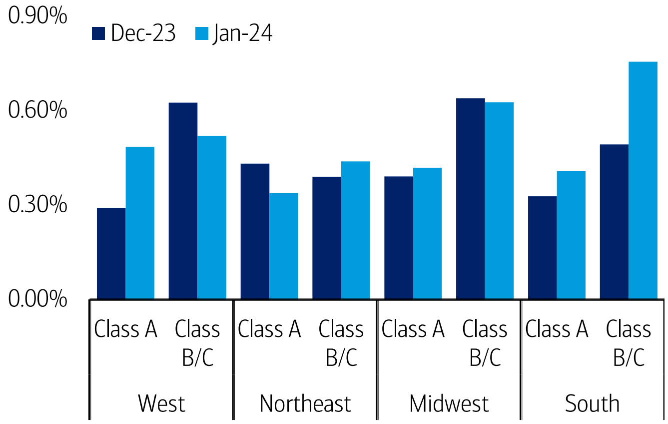
Do we expect the OER/rent wedge to persist?

In addition to the BLS analysis, a simple comparison of regional level data also points to a strong likelihood that the gap between the two measures was more noise than signal (Exhibit 16). Most of the acceleration in OER inflation from January was driven by smaller cities in the South. The BLS samples roughly 8,000 rental units per month, most of which do not report a rent increase and only 25% are single-family detached homes. Therefore, the more granular the cut of the data, the greater the standard error and greater chances of statistical noise (Exhibit 17).

Exhibit 16: OER % m/m by region and city size (NSA % change)
The increase in OER inflation was narrowly driven



Source: BLS, Haver Analytics

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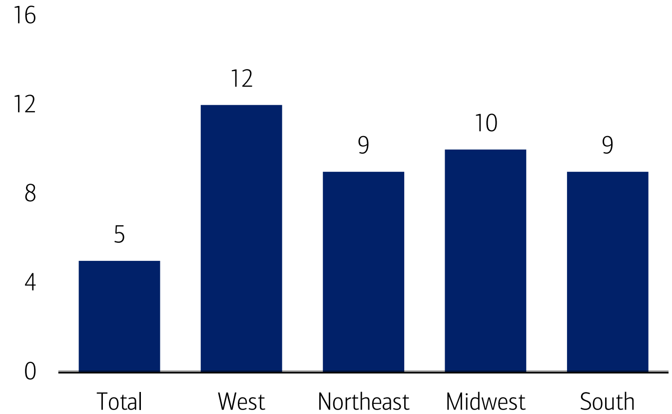
Exhibit 17: OER % m/m standard error (2023)
The standard of error increases when looking at more granular data



Source: BLS

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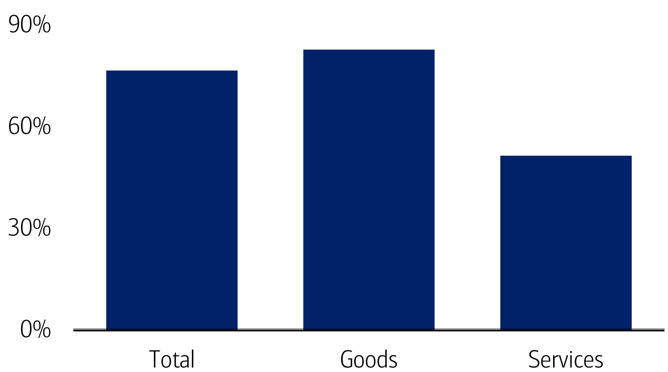
We can draw a few conclusions from this analysis. First, the increase in single-family detached units was not the only factor behind the divergence. Much of the difference was likely noise. Second, OER is more likely to run above rent inflation this year than in prior years. This will depend on the evolution of single-family detached inflation and other rent inflation, but the construction of OER and rent have built-in inertia. Third, we still expect both OER and rent inflation to moderate over the course of this year, but it may prove to be a slow-moving process.

What role does seasonality play in strong January print?

In addition to the acceleration in OER, we think that residual seasonality may have biased January inflation higher. January is often a time when businesses adjust prices, as it is the start of the calendar year. Indeed, the not seasonally adjusted shows a high share of categories where January inflation exceeds the average across the remainder of the year (Exhibit 18). This is particularly the case for goods. While seasonal adjustment is designed to account for this phenomenon, the January CPI data has been revised down often, suggesting that residual seasonality could be at work (Exhibit 19).

Exhibit 18: Share of CPI categories where the average January % m/m (NSA) exceeds the average for the remainder of the year
Businesses tend to increase prices in January by more than in the rest of the year



Source: BLS, Haver Analytics, BofA Global Research

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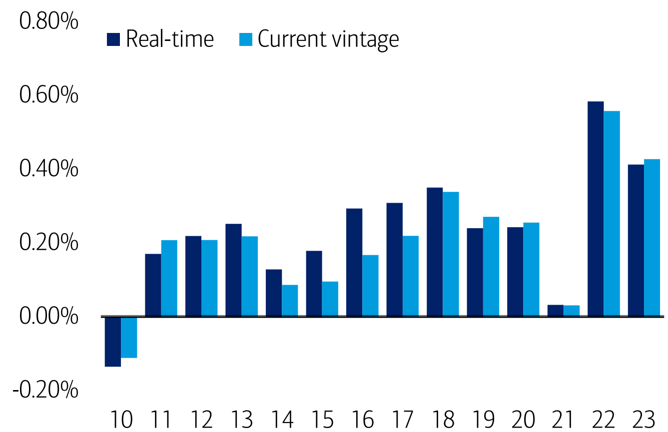
Exhibit 19: January Core CPI (% m/m SA)
Over time, January inflation has been revised down often



Source: BLS, ALFRED, BofA Global Research

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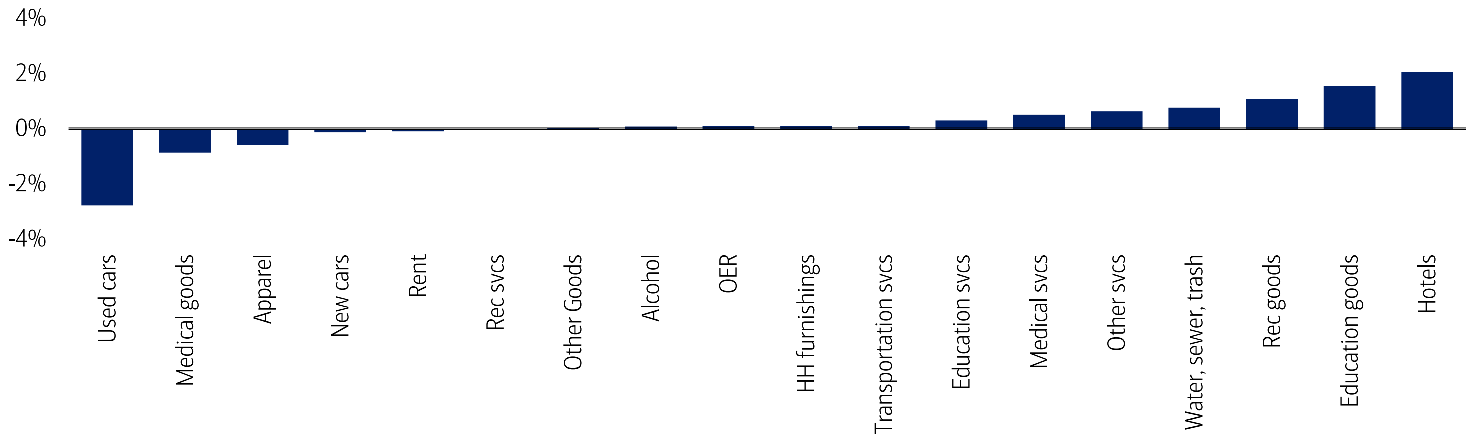
Looking at this year's January data, we do think that there is reason to believe that residual seasonality biased the numbers higher to a degree. To test this idea, we compare the January % m/m change against its trailing six-month average by major category (Exhibit 20). We find a rapid acceleration in several categories. Hotel prices are always volatile, but the surge in education goods, recreation goods, and water, sewage, and trash collection services seem abnormal. We, therefore, think that it is reasonable to discount the surge in many of these categories.

Exhibit 20: January % m/m inflation versus the trailing six-month average by major category
A simple comparison of January data versus its trend suggests that the January effect may have biased inflation higher in January



Source: BLS, Haver Analytics, BofA Global Research

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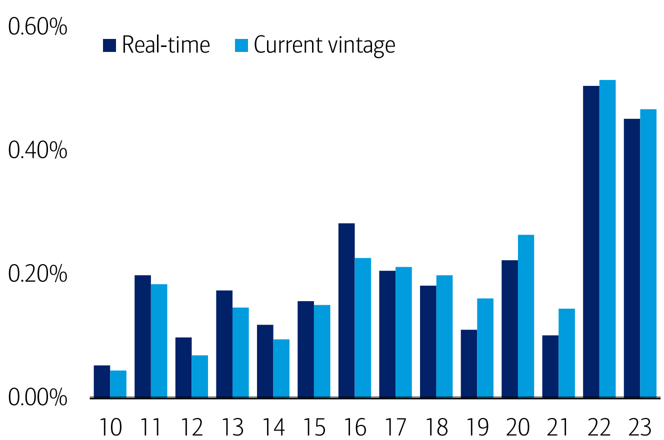
Should we be concerned about a February effect?

While the January effect may have been another source of upside pressure last month, we do not expect it to be a material issue in February. Comparing the real-time February core CPI data to its current vintage, we find that there have been just as many years of downward revisions as upward revisions (Exhibit 21). Moreover, we find that the average of February inflation in real time is not materially different from the average across the remainder of the year.

Exhibit 21: February Core CPI (% m/m SA)
February inflation has been revised higher in every year since 2016



Source: BLS, ALFRED, BofA Global Research

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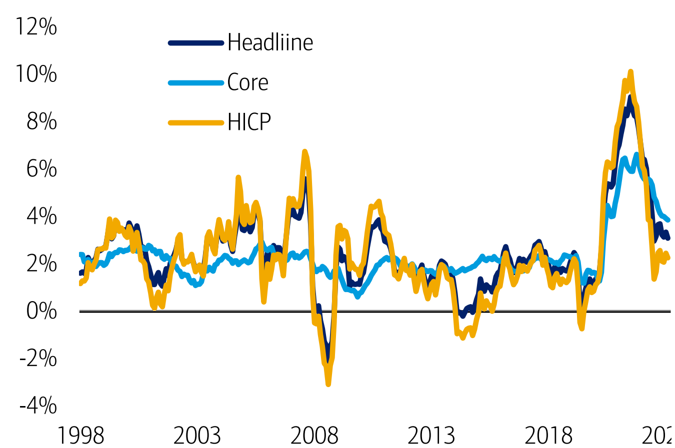
Exhibit 22: CPI inflation (% y/y)
HICP inflation, which excludes OER, is running below headline and core



Source: BLS, haver Analytics

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Should the Fed look through OER inflation?

A question that we also think is worth discussing after the January data is whether the Fed should include OER inflation in its evaluation of price stability. We think that several arguments would support excluding OER from monetary policy decision making.

1. The convention already exists. The European Central Bank reports a Harmonized Index of Consumer Prices that excludes owner occupied housing. The BLS also constructs this measure. It shows that inflation pressures have fallen sharply (Exhibit 22).

2. OER inflation is not something that affects homeowners. Most homeowners are locked into long-term mortgages. Indeed, the homeownership rate in the US is close to two-thirds, 40% of which have no mortgage. Of homeowners with a mortgage, the majority have a mortgage below 4%. These households have therefore not seen a change in monthly payments for housing, unlike renters.

While we see good arguments to exclude OER from the Fed's decision-making process, we realize that it is unlikely. There are numerous ways to cut or present the inflation data that would support hawkish and dovish policies. Because of this, the Fed does not want to appear as if it is cherry-picking the data. Therefore, we continue to expect it to emphasize the standard headline and core measures in its communications.

That said, the Fed targets PCE inflation, where OER has a much smaller weight than CPI and shows less inflationary pressures. As a result, it does downplay the signal from OER in its monetary decision process.

Bottom line: A February CPI print in line with our expectations should endorse market pricing for a June rate cut. A stronger print could challenge the market's assessment of the Fed's confidence in disinflation and push back on more cuts versus dots priced this year. CPI swaps reflect pricing for a stronger print than our forecasts and present downside risk to front-end inflation longs on a consensus print. We recommend that investors lighten up on inflation longs ahead of the print. However, our conviction that services inflation will be slower to moderate versus market pricing and upside commodity risks suggest maintaining long positions without hedging energy exposure for a longer time horizon.

Analyst Certification

I, Meghan Swiber, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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[i] The calculation of OER uses "pure rents" which strips out utility costs included in rent prices of rental units.