

## The Global Thinker

## Let's talk about inflation risks

**Beware of upside inflation risks in the US**

A reacceleration of inflation is still the most underpriced risk for an economy where final demand grew at 3% in 2H23. Inflation breakevens are painting a mixed picture, with 2y at 2.2% but 5y5y increasing 30bp in January, still within post pandemic range. At the same time, an aggressive easing cycle is priced in, way more than what the Fed has signaled. The upside risks to inflation would be the most disruptive outcome for markets through the negative spillovers of higher US rates over other asset classes.

**The rapid disinflation is supply rather than demand driven**

Markets and the Fed cannot claim to have a good record forecasting post-pandemic inflation. However, markets don't seem to have learned the lesson. Immaculate disinflation is taking place with the economy growing above potential, but there is no evidence of a productivity boom. This unusual correlation between prices and economic activity hints that most of the disinflation recently observed was supply rather than demand driven as bottlenecks normalize. As much as the persistence of inflation was underestimated in 2022, the persistence of disinflation could be overestimated now.

**A two-speed economy is a hard signal-extraction problem**

The core upside risks for the inflation outlook are: the economy is at full employment; the labor market is tight; consumption remains resilient; fiscal policy is too pro-cyclical and disinflation is concentrated in goods. Both supply and nominal spending are growing but supply is temporarily growing relatively faster due to bottleneck normalization. Once supply normalizes, trend inflation will be mostly demand driven. The US economy is essentially a service economy. If supply is reaching an upper bound and nominal spending remains robust, inflation can reaccelerate. Geopolitics and fiscal policy are additional sources of risk in an electoral year.

**A non-linear Phillips curve helps immaculate disinflation**

A non-linear Phillips curve can generate a fast drop in inflation with low output variability. But the last mile can be harder to achieve if we move into a flatter segment of the curve. Inflation risks are skewed to the upside if a supply shock hits the economy with a still tight labor market if nominal spending remains strong. Wage inflation remains too high to be consistent with price stability in an essentially service economy.

**Diego Maradona would compliment Jay Powell**

The Maradona Theory of Interest Rates is alive and kicking: let the market do de facto easing but keep the optionality open. That explains why the Fed might find optimal reasons not to push back strongly. The option value of waiting until more information arrives is high, since starting the easing cycle has a strong irreversibility component. Trimmed mean PCE at 2.6% is good but not 'mission accomplished.' Financial conditions are easing and if  $r^*$  is much higher than pre-pandemic, the policy stance might not be as tight as it seems. Following that logic, the risk of higher for longer increases materially.

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## What can go wrong with US inflation?

As we discussed in our Year Ahead report, we expect a mild global slowdown to 2.9% growth in 2024 from 3.1% in 2023. The US should continue outperforming Europe, while China growth should stabilize somewhat, creating a better growth mix for EM (see [Year Ahead 2024: Growing apart, cutting together](#)).

We also expect inflation to keep moving lower across most countries, and central banks to either start or continue easing monetary policy. In particular, our US economists expect core CPI and PCE to land at 3.0% and 2.5% by the end of the year (4Q/4Q), with the Fed starting the easing cycle in March, cutting 25bp per quarter until it reaches a terminal rate of 3%. Along the same lines, our European economists expect CPI to finish at 2.3% this year, while eventually undershooting the target in 2025. They expect the ECB to wait until June to start cutting rates in clips of 25bp per quarter, but eventually accelerating the pace as inflation undershoots. (see [Global Economic Weekly: Zen and the art of forecast maintenance](#)).

Back in November, we also highlighted several risks to our baseline scenario, all of which remain relevant. However, of all these risks, we need to focus on one in particular: a potential resurgence of inflation in the US.

### Why to focus on upside inflation risks?

Because it is the most underpriced risk in the market. The US economy is running at full employment (if not beyond), the labor market remains tight, and the market is pricing in an aggressive easing path for this stage of the cycle.

The US economy grew at an annualized rate of 3.3% in 4Q, a major upside surprise. At the same time, 2y CPI-based inflation breakevens are at 2.2%, 40bp below our own forecasts, while interestingly 5y5y inflation breakevens moved higher 30bp in January to reach 2.4%. When adjusted for the historical gap between CPI and PCE, this implies rates of PCE inflation at or below the Fed's 2% target. With inflation moving lower, most measures of inflation expectations have adjusted lower too, with the NY Fed survey showing 1y and 3y inflation at 3.0% and 2.6%, respectively.

Not surprisingly, the complacency in inflation expectations also translates into an aggressive easing cycle priced in for the Fed. The market priced in 138bp of cuts for the next 12 months and a terminal rate of 3.34%.

Due to its implications for US rates and the spillovers of higher US rates for other asset classes both at home and abroad, understanding upside inflation risks is critical.

## A brief detour on inflation dynamics

The dynamics of US inflation continue showing significant progress. Since the peak in the summer of 2022, inflation moved lower across most measures, be it PCE, CPI or its core, super-core or trimmed mean variants. However, the disinflation observed was mostly concentrated in goods, with services inflation being significantly stickier (see Exhibit 1 and Exhibit 2)

For a variety of reasons, including that it better captures substitution effects in the consumption basket, the Fed focuses on PCE as its preferred measure of inflation, with a 2% target. Following the recent print of core PCE at 2% on a six-month annualized basis, many claim 'mission accomplished'. However, we think there is more under the hood that needs to be considered.

For starters, there is a lot of cherry-picking in terms of what measure of inflation to adopt at the time of making the point that inflation is over. Although on an annualized basis PCE converged to 2% and core PCE printed 2.1% in December, trimmed mean PCE, which is much less volatile than core PCE, is still at 2.6%.

## A tale of more than two shocks

The combination of the pandemic and the Russia-Ukraine war represented massive supply shocks to the global economy. However, not all countries or regions have been equally affected. In addition, the policy response to deal with both shocks was unprecedented. Both fiscal and monetary policy were eased to accommodate, even if the size of the stimulus differed across countries.

Focusing on the US, the fiscal stimulus of \$3 trillion, coupled with monetary easing and the global supply shocks, explain the spike in inflation. It remains a topic of debate how much of the observed inflation was demand or supply driven, but it is hard to argue that inflation was purely supply driven. Several studies have tried to decompose the realized inflation in supply and demand components, indicating that at least 40% of the inflation observed in the US can be attributed to demand factors. Internal analysis by our own US economics team confirms this view; supply and demand factors were roughly proportional.

Moreover, the increase in inflation during 2021 and 2022 was much stronger for goods than for services, as consumption patterns shifted due to the lockdown of the economy (see Exhibit 1 and Exhibit 2). Households spent more on remodeling their houses instead of going on vacation (the nesting effect). Therefore, initially, the goods sector was leading the recovery, while the services sector was naturally depressed. As the economy reopened, the service sector recovered, and with that services inflation. In addition, a squeeze in the housing market was responsible for the increase in housing inflation, which represents a sizable fraction of consumer spending (34% of CPI and 15% of PCE).

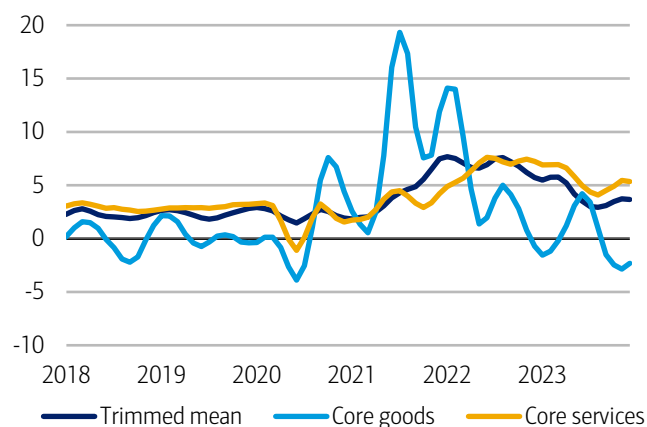
## Most disinflation so far may have been supply driven

A similar analysis identifies the drivers of the observed disinflation during 2023 (see report [Soft inflation, strong spending keep a March cut in balance](#)). As we noted above, most of the disinflation took place in goods and much less so in services. Initially, it took much longer than expected for global supply chains to normalize, and the late lockdown in China probably didn't help, likely creating more persistence in both headline and core inflation. However, supply-side normalization accelerated in 2023 (see Exhibit 3 and Exhibit 4).

At the same time, the US economy proved far way more resilient than initially expected and the labor market remains tight. Consensus forecasts for growth and inflation at the beginning of 2023 were 2.0pp lower and 0.2pp higher than realized, respectively. In our view, this unusual correlation between prices and economic activity hints that most of the disinflation recently observed was supply rather than demand driven.

### Exhibit 1: Core CPI services inflation is still high....

Trimmed inflation, and core inflation (CPI, 3m/3m saar, %)

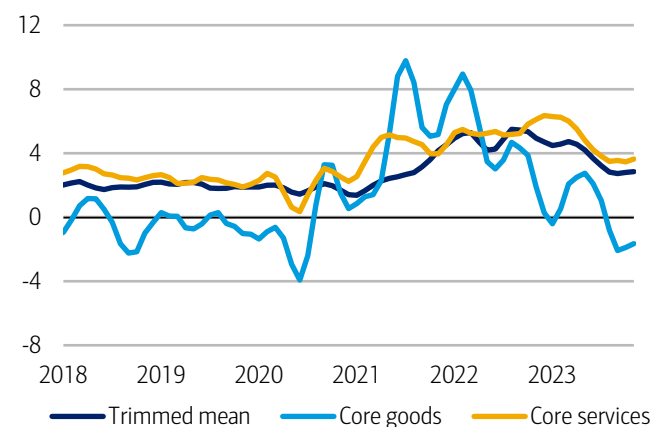


Source: BofA Global Research, Haver

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### Exhibit 2: ...as is US core PCE services inflation

Trimmed inflation, and core inflation (PCE, 3m/3m saar, %)



Source: BofA Global Research, Haver

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## Supply-driven disinflation should not bring too much comfort to the Fed

If most of the observed disinflation was supply driven, with the economy growing above potential and a still tight labor market, disinflation should not bring that much comfort to Fed officials.

As we discuss below, nominal wage growth is decelerating but still not converging to pre-pandemic levels. This is particularly clear in the services sector, which could feed into more pressure on services inflation down the road. In other words, were goods deflation to end sooner than later, services inflation could very well run at rates inconsistent with the Fed's 2% target.

## A few words about “soft landing”

The US outpaced even the most optimistic growth forecasts last year. Not only didn't the recession take place, but the economy grew at or above trend in every single quarter, leaving doubts on whether economic activity is really cooling down at the margin.

## Why is the US economy so resilient?

The 4Q GDP print was way above consensus and our US economists' forecast. The US economy grew 3.3% qoq saar vs 2% consensus. After a strong 3Q, inventories were supposed to be a major drag in 4Q, but only took off 0.1%. Final sales grew 3.2% (and final sales to domestic purchasers 2.7%), showing that the economy and the consumer remain resilient.

Two factors essentially drive this resilience: (i) a faster-than-expected recovery in business investment in 1H23, propelled by generous public policies (IRA, CHIPS and IIJA), and (ii) strong private consumption fueled by solid household balance sheets, massive fiscal transfers and resilient growth in disposable income on the back of a strong labor market.

### The lock-in effect and the fiscal impulse

In addition, households and corporates refinanced mortgages and debt when rates were low, limiting the impact of tighter monetary policy (see [Is refinancing the kryptonite of monetary policy?](#)). Real estate prices are high due to lock-in effects. The run-up in asset prices, both real estate and financial assets, translated into an increase close to 20% in real wealth of households.

The fiscal impulse was also stronger than expected, although its impact gets somewhat comingled in the investment and consumption dynamics (see [Around the world in 5 questions](#)). As we will discuss below, even though the fiscal impulse should recede in 2024, it will remain a relevant risk.

### Exhibit 3: Global supply pressures eased in 2023

Global Supply Chain Pressure Index

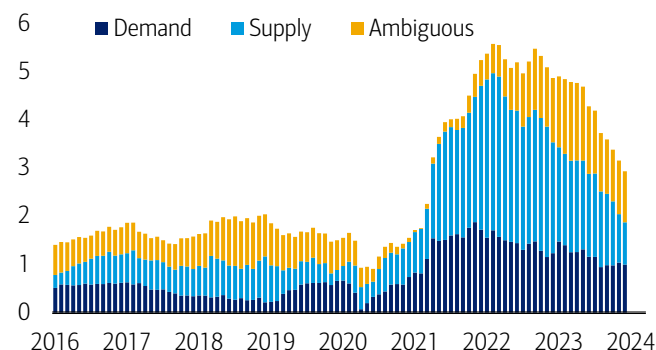


Source: BofA Global Research, NY FED

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### Exhibit 4: Contributions of supply and demand to y/y core PCE inflation (percentage points (pp))

Supply-side improvements have contributed to much of the decline in core PCE inflation



Source: BofA Global Research, Federal Reserve Bank of San Francisco, BEA

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## Some risks were lower than initially feared

The narrative for a stronger deceleration in consumption focused on credit card delinquencies, student loan repayments and a credit crunch in commercial real estate. Even though we have observed an increase in credit card delinquencies, they are concentrated in lower-income brackets, which are less relevant for aggregate consumption.

Similarly, unless we assume a completely myopic behavior, student loan repayments should not have a sizable impact on aggregate consumption. Finally, it is true that some subsectors of commercial real estate are in trouble, but they do not represent a large fraction of the sector and are therefore quantitatively not enough to shake the market.

## A partitioned economy

The US economy is fundamentally a services economy, with the services sector representing 70% of the total. If we analyze the economy from a supply-side perspective, we find an interesting dynamic rebalancing.

As we noted above, the goods sector boomed as consumers changed their consumption patterns away from services, due to the lockdowns, and then the trend reversed as the economy reopened (see Exhibit 5).

Therefore, during 2H22 and 1H23, while the services economy was recovering fast, the goods economy, more affected by supply-side bottlenecks in some specific sectors (auto, semi-conductor, etc.) was technically in recession. Towards 2H23, we started to see more balanced growth, with the goods sector recovering on the back of still robust private consumption. The increase in the relative price of non-tradables may explain part of this rebalancing in consumption, though durable goods spending was strong throughout 2023.

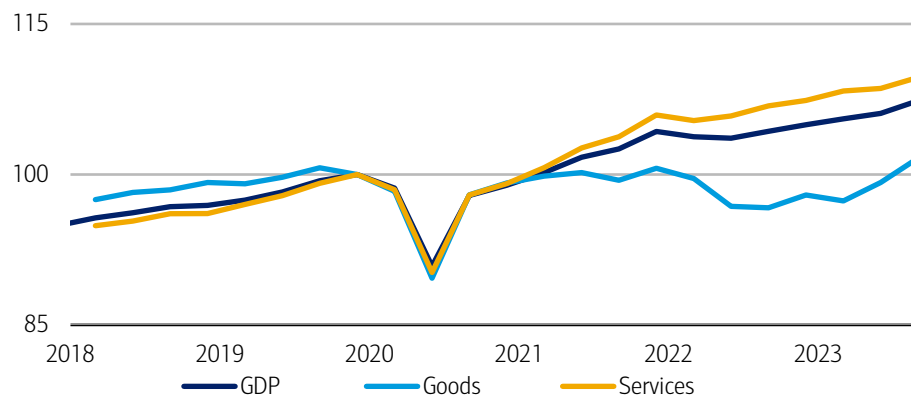
## Immaculate disinflation may not last

Both supply and demand are growing, but the former is growing faster on the back of the dissipation of bottlenecks. The increase in labor force participation is part of the supply story too, but it might have reached a limit, as we will discuss later. This explains the immaculate disinflation observed so far.

What remains to be seen is what may happen to the economy when supply ends normalizing if nominal spending continues growing at a solid pace, with a labor market that remains too tight, in particular in the services sector. This is the core of upside risk to inflation: what happens if supply improvement fades and demand improvement kicks in?

### Exhibit 5: After COVID-19, consumption shifted back to services

Real GDP by component (4Q23=100)



Source: BofA Global Research, Haver

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## Is there a productivity boom in the US? Not so fast

An alternative explanation to the outperformance of the US economy is that it may be experiencing a productivity boom, allowing it to keep growing at a faster pace without much pressure on inflation.

However, there is not much evidence of that as of yet. In a recent report, our US economists find that potential growth in the US has risen to 2.2% currently, from 1.7% pre-pandemic (see [Structurally higher US interest rates? Think again.](#)) However, it is hard to tell at this point if the improvement is sustainable, since it comes entirely from hours worked while productivity (output per hour) remains unchanged.

The rebound in participation rates among prime-aged workers is driving most of the results. If this is the case, it represents a risk to the labor market, potentially having a non-linear effect in nominal wages, if nominal spending remains robust over time.

## The AI boom may still create wealth effects

How can we rationalize this absence of evidence of a productivity boom with the re-shoring driven investment boom observed in 1H23 and the record valuation of the “magnificent seven” stocks, on the back of an AI productivity boom? The best way is to think about it as an expected productivity boom in the future, that the market is (correctly?) discounting.

Interestingly, the expected productivity boom creates a wealth effect that may increase consumption today as households smooth their perceived higher permanent income. Since the more productive technologies are not yet available, the net effect should be an increase in real interest rates and consumption, in line with what we observe today.

The debate about the productivity boom is also important to understand whether  $r^*$  is migrating towards a permanently higher level, independently of the fiscal policy stance. As we will discuss, for the Fed, if this is the case, then the current stance of monetary policy might not be as tight as it seems. On the other hand, if there is no such productivity boom, then the economy is running the risk of cyclically overheating once the temporary increase in supply due to the easing of bottlenecks coming to an end.

## Is the economy too hot or not? A look at the labor market

If the economy is growing nicely and inflation is decelerating quickly, isn't that good news? In principle, yes. This is encouraging, but it is not the whole story. A look at the labor market indicates that despite some cooling, it is still way too tight to claim victory.

## What is the best gauge of the labor market?

The unemployment rate remains at record lows, but this statistic is not sufficient to characterize the state of the labor market. Payroll numbers are averaging slightly below 200k over the last three months, still too high if we consider 100k as the equilibrium level consistent with population growth.

## The vacancy ratio was a leading indicator

More importantly, the vacancies-to-unemployment ratio (vacancy ratio), which is considered by labor economists as the most reliable measure of labor market tightness, is still above 1.25, and much higher in the services than in the goods sector. A ratio closer to 1 would be more consistent with equilibrium in the labor market.

Notice that the vacancy ratio was an early indicator of the tightness of the labor market when inflation started to rise, while the unemployment rate was still indicating some slack. This can partly explain why the Fed and the market underestimated the increase in inflation for so many months in a row back in 2H21 and 1H22 (see Exhibit 6 and Exhibit 7).



## Labor supply may not be as favorable ahead

The rise in demand for labor post pandemic was met mostly by growth in the supply of labor driven by two factors: an increase in labor force participation and a boom in immigration (see Exhibit 8 and Exhibit 9). This explains why nominal wages, although peaking at 6%, did not grow much faster.

Labor force participation, which had been trending lower pre-pandemic (see Exhibit 10), is reaching a natural limit and immigration will unlikely continue growing at a fast pace in an electoral year. Therefore, if labor demand remains strong on the back of strong nominal spending, there can be a non-linear increase in nominal wages that can feed into service inflation.

## Phillips curve: dead or alive?

Most standard macroeconomic models used for monetary policy are basically built on three key equations:

1. One describing the demand side of the economy (i.e. a dynamic IS curve) which shows that aggregate spending depends negatively on the expected real interest rate,
2. One describing the supply side of the economy (i.e. Phillips curve) that shows a short-term positive relationship between inflation and the output gap (or, alternatively, the unemployment rate), augmented to incorporate the impact of inflation expectations and supply shocks
3. A central bank reaction function (i.e. Taylor rule) linking the policy rate to deviations of inflation from the central bank target and the output gap (or the unemployment rate).

Therefore, to understand how an economy adjust to shocks and how central banks react to those shocks, it is key to understand the nature of the Phillips curve.

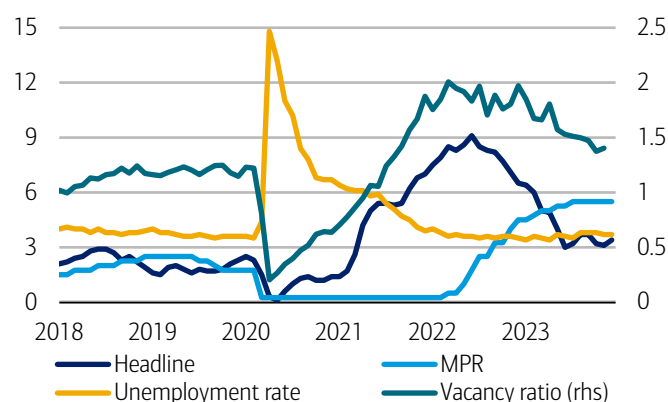
## The supposedly “flat” Phillips curve may explain forecast errors

Before the pandemic, the common understanding was that the Phillips curve was rather flat. That is, the economy could run hot without much pressure on prices. The acquired credibility of the Fed over the years kept inflation expectations anchored at low levels close to the inflation target of 2%.

This view created the perception that the initial fall in employment associated with the pandemic would prevent inflation from accelerating sharply in 2021/22. This could help explain why markets and the Fed’s forecasts underestimated inflation and, later on, why

### Exhibit 6: Inflation started rising while labor market was tight

Inflation, unemployment rate, vacancy ratio and MPR (%)

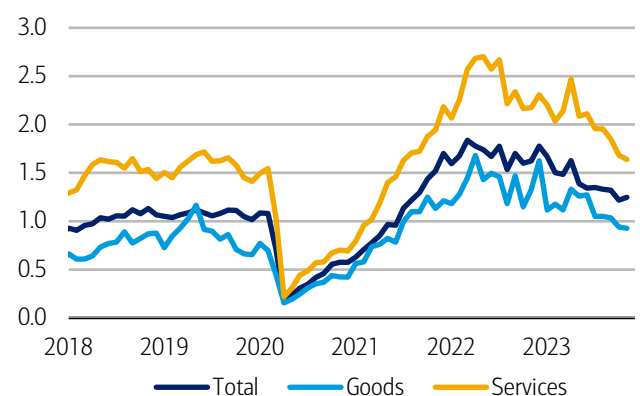


Source: BofA Global Research, Bloomberg

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### Exhibit 7: The labor market is tighter for services

Ratio of vacancies and unemployed people



Source: BofA Global Research, Haver

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most forecasters expected the subsequent spike to require a painful recession to bring inflation back to the target, even when long-term expectations remain properly anchored.

## What if the Phillips curve is non-linear?

An alternative view, which would be consistent with the role of supply shocks in the Phillips curve, is that it is highly non-linear, especially if we use the vacancy ratio as a measure of labor market tightness (see Exhibit 11). If the Phillips curve is non-linear and the labor market is tight, we can infer a few important corollaries.

First, the tradeoff between inflation variability and output variability is state-dependent, that is when inflation is high one can observe fast disinflation without a recession (immaculate disinflation) but for sufficiently low levels of inflation, it becomes stickier and more output variability is needed to bring inflation to the target more permanently.

Second, if we are on the steep segment of the Phillips curve, with a tight labor market, a supply shock can bring inflation up quickly, so central banks have an incentive to be overly conservative and keep interest rates relatively high despite favorable disinflation dynamics. In other words, the impact of supply shock on prices are exacerbated in the steep segment of the Phillips curve.

### Could the Fed decide to wait?

This non-linear characterization of the Phillips curve is relevant because it can explain the recent immaculate disinflation observed in the US, while at the same time help rationalize why it could be misleading for the Fed to trust the recent disinflation to start cutting rates as aggressively as the market is pricing. We elaborate further on this.

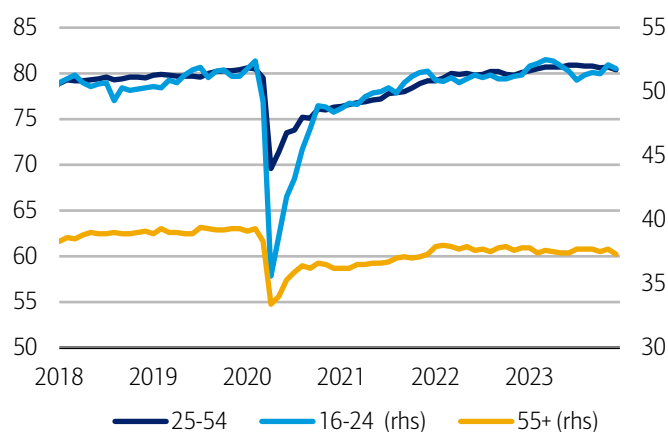
## Is wage inflation relevant to explain price inflation?

The non-linear Phillips curve links price inflation to wage inflation. In a 2022 speech, Chairman Powell discussed the importance of monitoring nominal wage growth as it is relevant for the pricing of services ex-housing. Since then, several studies documented that wage inflation is correlated with price inflation but labor cost growth has a small effect on services ex-housing, therefore not able to explain much of the increase in core PCE. In other words, the causality from wage to price inflation is missing in the data.

Two elements might explain the econometric findings. First, for the pre-pandemic period, inflation was very low and stable, so there is not enough variability in the data to find a relevant effect. When prices are stable, people don't care about inflation, which economists refer to as a rational inattention argument. Second, for the post-pandemic

**Exhibit 8: Prime age workers have recovered but likely peaked**

Employment-to-population ratio (%)

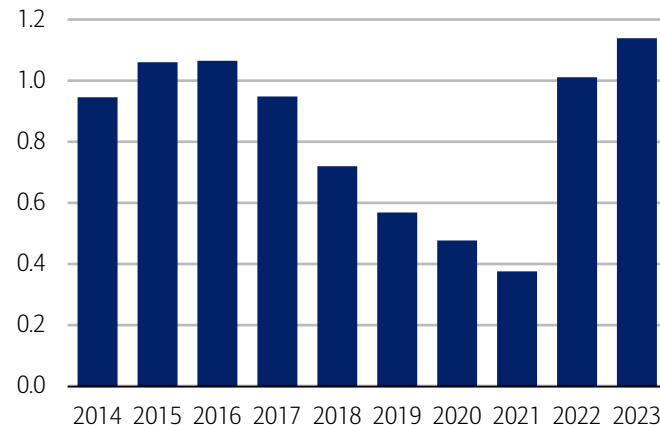


Source: BofA Global Research, Haver

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**Exhibit 9: Net international migration recovered sharply in 2022**

Number of migrant (millions)



Source: BofA Global Research, Haver

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period, supply shocks took a dominant role in the pricing of goods and services, causing a volatile change in relative prices that also complicates the inference process.

## How do real wages behave with supply and demand shocks?

One striking feature of wage dynamics since 2021 is that nominal wage growth accelerated relative to pre-pandemic, but real wages dropped significantly in particular in 2022. In other words, price inflation was higher than wage inflation.

However, in the last few quarters, we have seen an increase in real wages with price inflation falling below wage inflation. Despite the deceleration, nominal wages continue growing at a higher rate than before the pandemic, even without conclusive evidence that an improvement in labor productivity can justify it.

The observed dynamics can be easily rationalized since the supply shock reduced the availability of non-labor inputs whose supply is very inelastic and there is limited substitution for that input, causing real wages to drop (see Exhibit 12 and Exhibit 13).

Interestingly, if at the same time the government and the central bank engineer a spending shock through aggressive monetary and fiscal stimulus, the change in relative prices is being exacerbated, further reducing real wages. Once the supply shock fades, nominal wages continue growing, but faster than price inflation, since the supply of the critical input becomes more elastic. During this period, real wages recover.

It is important to understand this adjustment mechanism because it helps clarify why nominal wages do not seem to help explain the observed price inflation. However, once supply shocks dissipate, we should expect more pressure on nominal wages if nominal spending remains growing at a solid pace and the labor market remains tight. In this case, labor is the input that would become relatively scarce.

## Putting it all together: what can go wrong with inflation?

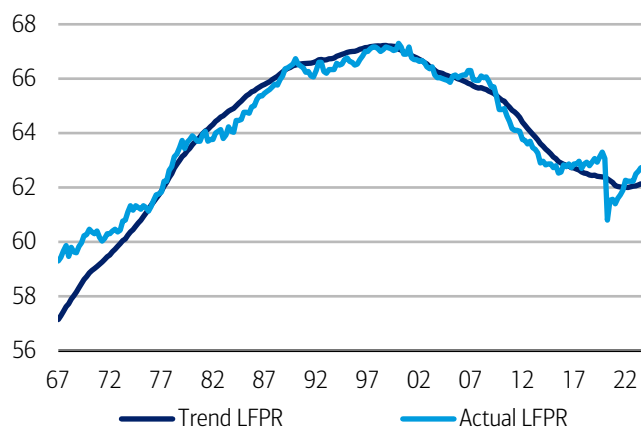
After discussing the drivers of the strong recovery of the US economy and the genesis of the observed disinflation dynamics, we now elaborate on what could go wrong and why it might be too early to claim victory.

### Supply vs demand shocks: a signal extraction problem

In a recent speech, Governor Waller discussed the signal extraction problem we are currently trying to disentangle, which we think is the most important driver of any potential upside risk to inflation. We summarize again our core argument below.

#### Exhibit 10: Labor force participation overshoot the trend

Trend labor force participation rate (LFPR) versus actual (%)

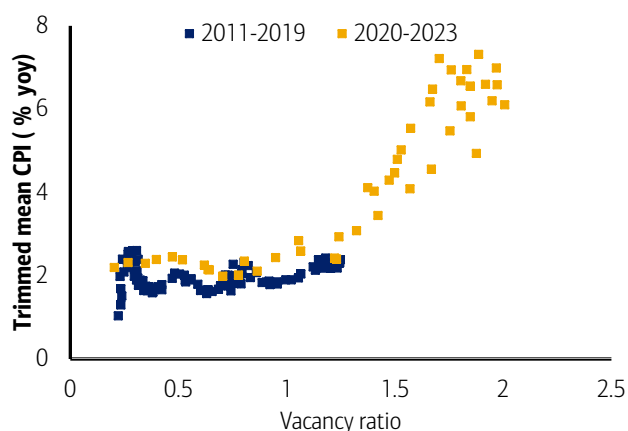


Source: BofA Global Research, BEA, Haver

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#### Exhibit 11: Tighter labor market and high inflation

The economy may have moved to a steep segment of the Phillips curve



Source: BofA Global Research, Haver

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If the economy is growing and, at the same time, we are observing price disinflation, mostly explained by a recent acceleration in the normalization of supply disruptions, then we are facing an economy where both supply and nominal spending are growing, but supply is growing faster temporarily. Once supply normalizes, we will see more clearly how fast nominal spending is growing and if that is consistent with price stability. There are reasons to think that consumption, investment and the fiscal stance, despite a gradual slowdown, represent a risk to the outlook.

With the labor market still too tight, despite some softening at the margin, if nominal spending remains strong and labor demand remains robust, labor supply may not be able to meet the marginal demand without putting pressure on higher nominal wages. Interestingly, employment growth would continue falling, but wage growth would not, as the market would remain tight. If the economy is still in the steep segment of the non-linear Phillips curve, any additional supply shock could reaccelerate inflation quickly.

Since by then supply bottlenecks would have normalized, the increase in nominal wages would most likely have a higher impact on price inflation, both from the cost and spending side of the equation. This may not be the baseline, but it is a risk the Fed needs to consider before claiming 'mission accomplished.'

## Geopolitics matters: Red Sea disruptions could last for some time

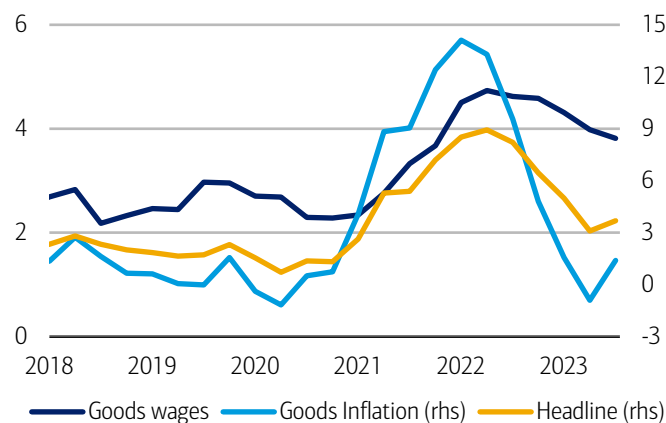
Even though geopolitics still represent a minor risk, they need to be kept on the radar. Red Sea developments have been playing out in line with our view of ongoing acute disruptions to shipping costs and supply chains that could persist (see [Global rate cuts lost at \(Red\) Sea?](#)).

Houthi disruption of maritime traffic has not stopped, despite US and UK strikes. US pronouncements have highlighted that the strikes have not yet materially eroded Houthi offensive capabilities. US/UK warnings have led to more announcements of traffic being rerouted away from the Suez Canal.

At our latest conference call, the key takeaway from our expert speaker, Michael Singh-Managing director, Washington Institute, is the risk of continued tit-for-tat between US/UK forces and Houthis in the near term. His base case is for tensions to remain confined around the Red Sea area. He suggests that lower Iranian logistical support to Houthis (through the withdrawal of a spy ship) may mean less sophisticated attacks, and that a redeployment of the spy ship could then be an escalatory gesture. The Houthi announcement that they would not target Saudi or UAE reduces the risk of a regional escalation, though.

### Exhibit 12: Goods inflation fell below goods wages growth...

ECI Compensation annual growth and CPI inflation (goods, %)

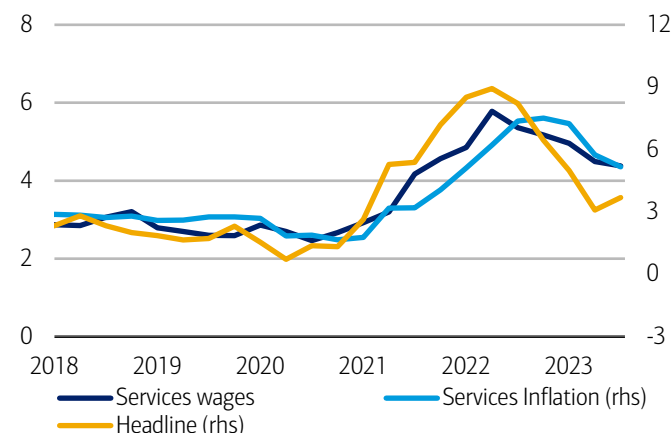


Source: BofA Global Research, Haver

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### Exhibit 13: ...but services inflation is above services wage growth

ECI Compensation annual growth and CPI inflation (services, %)



Source: BofA Global Research, Haver

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However, being an electoral year in the US doesn't help. The Biden administration has strong incentives to minimize geopolitical noise, while many players in this conflict might see this as an opportunity to maximize bargaining power as we get closer to the elections. In this sense, it is a risk worth monitoring, with implications not only for prices but also for fiscal policy.

Since December, shipping costs have increased by up to 300% on routes from Asia to Europe. Based on recent literature, the observed doubling in freight costs for US-bound routes could lead to a relatively modest inflation pickup of about 0.3% over a quarter. Core goods prices have been an important driver of disinflation over the past year as supply chains unclogged, with core goods prices falling in six of the last seven months through December and expected to continue decreasing.

It remains to be seen how much room there is for companies to absorb the increase in shipping costs through lower margins. Higher shipping costs could limit or even reverse further declines, although the share of core goods is not that sizable in the consumption basket.

Finally, geopolitics also interplay with a global trend towards food and energy security, which, coupled with a way more volatile climate outlook, could impact food and energy prices in coming months. Inflation expectations track oil prices closely and Brent is up \$8 since the beginning of the year.

## Fiscal policy still a risk for inflation and rates

Fiscal policy was much looser than expected in 2023. The primary fiscal deficit almost doubled to reach 5% of GDP, creating a sizable fiscal impulse to the economy. Judged by the behavior of excess savings, households have smoothed out the fiscal windfall to some extent, which means relatively strong consumption dynamics down the road.

This year, we expect the primary deficit to move lower towards 3.5-4% of GDP, but the estimate does not incorporate the tax deal and the border aid package that are being discussed in Congress. If both pass, they would imply an additional deterioration of 0.6% of GDP.

In addition, a Republican sweep in the presidential elections would significantly increase the odds of an extension (at least partial) of the tax cuts in 2025, which represents a risk to inflation expectations and more importantly to real rates. A Democratic sweep could lead to a continuation of prior industrial policies and infrastructure spending.

As discussed before, fiscal policy is too pro-cyclical and a proper fiscal consolidation is needed (link to [Around the world in 5 questions](#)). However, it is difficult to be optimistic about the US Congress' ability (or even willingness) to engage in meaningful fiscal consolidation. Today, about two-thirds of the federal spending is non-discretionary and this fraction keeps growing every year due to a worsening of demographic trends. Removing a temporary subsidy that people perceive as an acquired right is a very significant challenge.

Without fiscal consolidation, we should expect higher real rates. Alternatively, we may see a combination of more financial repression and higher inflation.

## What about downside risks?

Markets and analysts have been focusing on downside risks to inflation. We discuss our take: The rents factor is real but already priced in, the China factor is conceptually inaccurate and practically second order.

### Downside risk 1: The rents factor

Shelter represents close to one-third of CPI (somewhat less in PCE) and proved to be a fairly persistent component of services inflation. However, by construction, it takes some time for rents and owner equivalent rents to react in inflation measures to current ask prices in the market.

Given the latest figures for new tenant rents, there is significant room for shelter to move lower. However, according to short-term inflation breakevens, it seems markets are already pricing a rapid disinflation in shelter. In other words, the downside risks to inflation, although relevant, are more than priced in. A slower pace of shelter disinflation represents an upside risk to short-term inflation.

Relative to the forecast of our US economists, it seems the difference between market pricing of expected inflation can be traced to a large extent to this component. However, if rent prices moved lower, this would represent an increase in disposable income that could be spent in some other goods and services.

As we were highlighting at the beginning, not all prices move in tandem, and monitoring particular changes in relative prices at a particular point in time might induce wrong inferences, in particular when there is some downward rigidity in prices and nominal wages. This is one of the reasons we favor trimmed mean PCE as a measure of trend inflation. Since relative prices are very volatile, it is more efficient to let the data speak.

## **Downside risk 2: The China exporting deflation factor**

From a conceptual point of view, it doesn't make much sense to talk about China exporting deflation to the rest of the world. At most, what China can do is export goods deflation, but not overall inflation since that is determined by the monetary policy implemented by each country. As long as central banks have independent monetary policy, they can set medium-term inflation at any level they target.

The goods deflation exported by China will translate into overall deflation or lower inflation for other countries only if central banks accommodate that shock. Instead, if central banks do not accommodate lower import prices, they will set monetary policy to generate an offsetting increase in the price of non-tradables. At most, this "export of goods deflation" can affect the relative price of goods vs services. In other words, saying that China is exporting goods deflation is as true as saying that China is exporting services inflation.

Regardless of the drivers, China's lower export prices have contributed to softer import prices of manufactured goods in the US and Europe, the two key trade partners of China. Yet, in both cases, the decline in import prices from China was much less than that in the overall import prices, suggesting that China might not be the most important driving force here. While it is hard to disentangle the effects of improving supply chains and falling import prices from China, we believe the former has likely dominated the disinflation seen in US CPI in 2023. In Europe, the main driver for falling import prices last year was energy prices (see [Will China export deflation to the world?](#))

While China might have contributed to the core goods disinflation to some extent, we believe it plays a limited role in overall US inflation dynamics. For the US, we estimate the share of Chinese imports in the total US goods consumption is less than 5% (and goods account for approximately 40% of the US CPI basket). In addition, the declines in import prices from China may not be fully passed through to consumer prices, as the cost savings could be absorbed as profit margins along the distribution channels.

## **Should the Fed cut in March? Will they?**

Our US economists expect the Fed to cut in March, but acknowledge it is a close call given the underlying strength in the economy. We elaborate on why skipping March and keeping rates higher for longer could be the right decision.

## **If inflation was transitory, did the Fed over-tighten?**

Some analysts argue that, given the transitory nature of the shocks that drove the spike in inflation, and that long-term inflation expectations remained anchored, central banks in developed economies could have refrained from hiking interest rates as much.



We disagree. The stability of long-term inflation expectations is not a sufficient statistic to conclude that fewer hikes could have been the right policy prescription. In a nutshell, causality should not be reversed. Inflation expectations are endogenous variables that react to monetary policy. It is because central banks hiked interest rates that long-term inflation expectations remain anchored.

This question is related to the now two-year-old debate on whether inflation was transitory or permanent. Nowadays, team transitory claims victory as inflation is quickly converging to target – largely due to the normalization of the supply side of the economy. However, it is hard to argue that inflation would have had the observed dynamic, had the Fed kept interest rates below 2%.

Moreover, the Fed, if anything, could be seen as not tightening enough when inflation started to rise, accommodating too much to the supply shock. In fact, absent the Fed accommodation, we should have observed not only a transitory effect on inflation, but also on the price level. On the contrary, the effect on the price level has been permanent, due partly to too much fiscal and monetary stimulus. In a nutshell, inflation was not only driven by supply shocks, but also excessive monetary and fiscal easing.

The Fed did not over-hike. Real policy rates remained negative for most of the last 2 years up until very recently. Certainly, the Fed didn't follow any version of the Taylor rule. Neither did it apply the Taylor principle that dictates an increase in the policy rate by more than one-for-one with the increase in inflation, and probably rightly so. Therefore, if monetary policy was not that restrictive back then, it would be unfair to criticize the Fed for validating a policy rate above what a Taylor rule would dictate to execute now that inflation is converging to target (see Exhibit 14 and Exhibit 15).

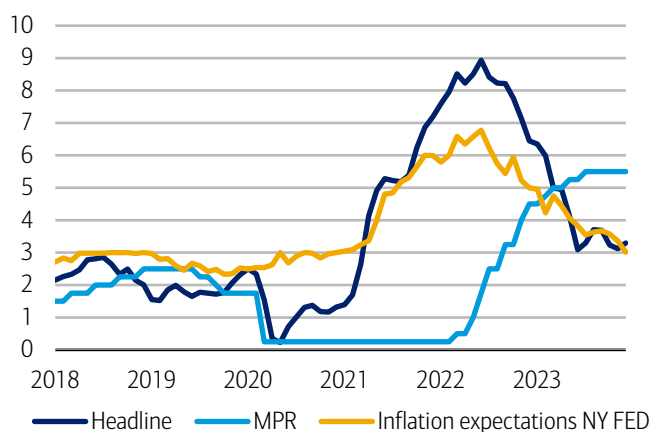
## Monetary policy and presidential elections: does it matter?

It is always difficult to conduct monetary policy in electoral years. The incumbent will always favor cutting rates, while the opposition will always see a cutting cycle in an electoral year as a contribution to increase the presidential chances of the incumbent. It is not difficult to make the case that the Fed has an incentive to cut rates aggressively. But it is as easy to make the opposite case, that the Fed has an incentive not to cut rates at all.

We are not going to elaborate here on those cases, but instead assume the Fed's decisions will be insulated from political pressures. However, presidential elections still matter through several channels. One of them is investment decisions, as the private sector might rush to take advantage of the implicit subsidies of the IRA/CHIPS/IJJA or

### Exhibit 14: Inflation and inflation expectations are converging

CPI headline inflation and Fed Funds Rate (%)

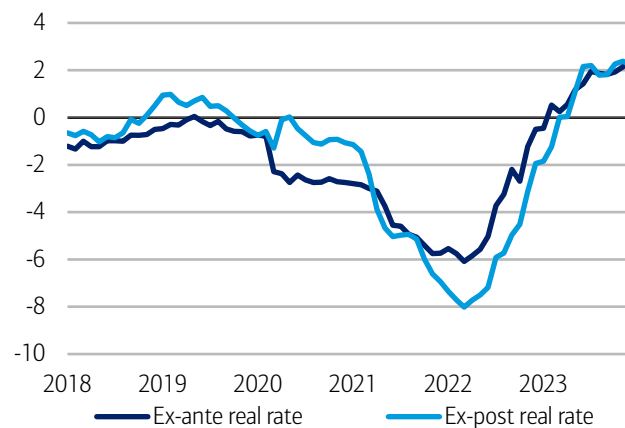


Source: BofA Global Research, Haver, Bloomberg, NY FED

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### Exhibit 15: Real policy rates have turned positive only recently

Ex-ante and ex-post real policy rates (%)



Source: BofA Global Research, Haver, Bloomberg, NY FED

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alternatively put investment decisions on hold until they have more clarity on the election outcome.

The second channel is fiscal policy, since under some scenarios we can have a rollover (at least partial) of tax cuts in the future, which could worsen even more the already fragile balance sheet of the public sector. A deterioration of the fiscal outlook would weigh on the determination of  $r^*$  and the reaction function of the Fed.

Finally, the global geopolitical equilibrium could look quite different depending on the outcome of the presidential elections, which also impacts how inflation expectations are being formed. Geopolitics naturally impacts on the fiscal outlook too.

## Financial conditions and the Maradona Theory of Interest Rates

Admittedly, financial condition indices are all over the place, some of them indicating that financial conditions tightened, while many others show that financial conditions are record easy. The difference lies in the way different indices are constructed. Our own indicator suggests financial conditions are moderately restrictive, tighter than they were in recent years, but below that observed in prior cycle peaks.

However, in light of the record-high level of the stock market and house prices, as well as liquidity conditions, real interest rates and credit spreads, it is hard to make the case that financial conditions are really tighter in the last few months for the current stance of the business cycle. A higher  $r^*$  relative to pre-pandemic levels and the resilience of the economy would point in the same direction.

Moreover, despite the drop in realized and expected inflation, the market is pricing in an aggressive easing cycle, easing de facto monetary policy and ironically reducing the probability that the Fed feels forced to validate those easier financial conditions.

The case is reminiscent of the Maradona Theory of Interest Rates, introduced by (ironically too) Mervin King, back then governor of the Bank of England. As readers will hopefully remember, Diego Maradona was a phenomenal Argentine soccer player (better than Messi? Who knows...).

In the 1986 Mexico World Cup, when Argentina was champion for the second time, Diego Maradona was the MVP of the tournament, and in the quarterfinals, Argentina defeated England 2-1 with Maradona scoring twice. The first goal was famous in itself (the “hand of God”) but the second goal was probably the best in the history of the game.

He started running towards the goal in the midfield, dribbled six players including the goalkeeper and scored. The most striking feature of that masterpiece was that Maradona moved in a straight line towards the goal. Why did he get away with it? Because England defenders expected him to move either to the right or to the left, so given the defender’s expectations, it was optimal for him to move forward in a straight line.

This is the way central banks conduct monetary policy sometimes. By letting markets believe they will move in a certain direction, while they are actually not sure if that is the right move, they let markets do the easing/tightening for them, while gaining some time and retaining the optionality until they have enough information to validate or push back against market moves.

Of course, one cannot systematically trick market participants, but under certain conditions that can emerge as an optimal strategy. This behavior can explain why the Fed is not necessarily pushing back against market pricing, while at the same time trying to gain time and incorporate more data into its information set before signaling the market the start of the easing cycle.



## Is monetary policy too restrictive? It depends on $r^*$

How do we define if monetary policy is restrictive or not? The simplest way is to compare the actual real policy rate (i.e. nominal policy rate adjusted by short-term expected inflation) with the natural real policy rate, also known as  $r^*$ . Even though we can somewhat observe actual real policy rate (using some measure of expected inflation), it is significantly harder to estimate  $r^*$ , which is unobservable.

Prior to the pandemic, most of estimates for real  $r^*$  were in the neighborhood of -0.5%. Post-pandemic, most likely the equilibrium  $r^*$  moved significantly higher, driven at least by a massive deterioration of the fiscal policy stance. If, we also assume a positive AI-driven productivity shock, there is an additional reason to think that  $r^*$  must be revised higher.

However, the problem is that most state-space models typically used to estimate  $r^*$  (basically a signal extraction problem) are ill-suited to identify a structural change in  $r^*$  post-pandemic, as they filter past data (including pre-pandemic data) to come up with an estimate, but by construction, there is not enough post-pandemic data to estimate the structural change.

Regime-switching models are not expected to do any better as we don't have many observations of regime switch, maybe the last one being the 2008 global financial crisis. In a recent paper, we estimated  $r^*$  for the US, finding that it increased to 0.5% in real terms (see [Structurally higher US interest rates? Think again](#)). However, given the limitations of the analysis, there are good reasons to think this can be interpreted as a lower bound.

As discussed before (see [Is refinancing the kryptonite of monetary policy?](#)), the massive wave of refinancing experienced when interest rates collapsed, limited the power of monetary policy to cool off the economy during the tightening cycle. The non-financial private sector was hedged against an increase in interest rates. This fact not only downplays any estimate of how restrictive monetary policy is, but also makes the tightening stance path-dependent.

Assuming  $r^*$  close to 1% in real terms and deflating the policy rate by the NY Fed Survey of Consumer Expectations, we find that the real policy rate became positive in the Spring of last year and above  $r^*$  in the Fall, which doesn't seem overly restrictive for an economy that is running at full employment.

## It is all about risk management

In finance, investment decisions are based on risk-reward considerations. High expected returns are not enough. Investors also take into account the risks, not only the most likely but also the tail risks. If the expected return is not high enough to compensate for a very small probability scenario of a very big loss, the investment is not worth it. Investors dislike "selling tail risk."

The same applies to monetary policy. In this case, inflation is close to the target and, by not cutting rates, the Fed is validating higher real rates. But the uncertainty around inflation is still high, the labor market is still tight, geopolitics and the presidential elections need to be factored in. Additionally, it is still hard to disentangle whether nominal spending will continue growing at a high rate once the supply side of the economy stabilizes and stops counterbalancing growth in nominal spending. Even if a tail risk, it is relevant for the decision-making process.

The economy is doing well and increasingly sending signals that it can absorb relatively high real rates without a problem. Recession is not in sight. Moreover, a combination of structural changes in the economy and the deterioration of the fiscal stance indicate that  $r^*$  is probably much higher than pre-pandemic. However, uncertainty is high on that front too.

In addition, there is an important signaling effect in starting the cutting cycle, which incorporates an element of irreversibility in the decision. It is not just a decision to cut 25bp. The credibility cost of aborting the easing cycle if inflation resumes is considerable. Moreover, when the Fed starts the easing cycle, the market response will be to reprice into an even more aggressive path of easing, and likely an even lower terminal rate, easing financial conditions even more. Anticipating that, the Fed might want some reassurance that the start of the easing cycle will happen once the disinflation process is perceived to be more sustainable. In the meantime, the cost of keeping real rates at current levels does not seem excessive.

The economy is at full employment and doesn't need more marginal stimulus, so starting an easing cycle can reaccelerate inflation, though that is not the main risk here since the Fed doesn't need to cut aggressively. On the other hand, if inflation reaccelerates, it might be enough with keeping rates high for longer rather than hiking at the margin. As we discussed before, as time goes by, the hedges of the private sector will start to expire and the same monetary policy stance will become more restrictive.

### **Did the Fed learn the lesson before the market?**

The market is pricing a very aggressive easing cycle for an economy that is not showing any sign of relevant weakness. The market is claiming 'mission accomplished'. And the market might be wrong, as much as it was wrong in completely underestimating inflation and overestimating the slowdown of the economy. And to be fair, the Fed, by delaying the tightening cycle by one year, was in the same camp. Inflation, as many things in life, might have proved to be transitory, but it was way more persistent than initially thought.

March is a very close call, and the Fed will have some important marginal data by then. But if the Fed decides to keep rates higher for longer while learning whether the recent disinflation is more permanent, then it will have learned the lesson before the market.

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