14 February 2022

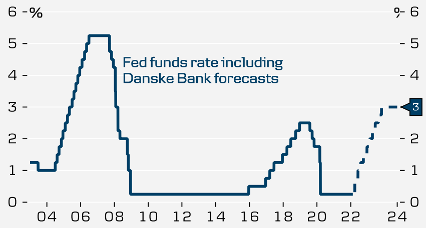
Fed Update

We expect a total of 200bp rate hikes this year starting with 50bp in March

Key takeaways

- Economists, including ourselves and the Federal Reserve, continue to underestimate the underlying inflation pressure.
- The Fed is behind the curve when looking at the current economic situation (actual data), different specifications of the Taylor-rule and financial conditions.
- We change our Fed call and now expect the Fed to deliver 200bp rate hikes this year (versus 125bp previously). We expect the Fed to hike by 50bp in March and 25bp on each of the following six meetings. If so, the Fed funds target range should be 2.00-2.25% by the end of the year.
- The door is open for an emergency rate hike near-term (like on 18 April 1994), but it is not our base case, as it is very rare. It also seems like investors misinterpreted comments from St Louis Fed President James Bullard
- We expect the Fed to hike three times in 2023 and go on hold when the Fed funds target range reaches 2.75-3.00%.
- We will not be surprised if the Fed announces it ends QE immediately although it did not happen over the weekend. We now expect the Fed to start QT in May with a cap between USD100-125bn (from June and USD75-100bn previously).
- We still see risks skewed towards the Fed pulling the emergency brake by hiking sooner and more forcefully. This also means a higher risk of a recession down the road and we will not be surprised if the yield curve inverts reflecting higher recession fears.
- The Fed needs to slow demand and reduce inflation fears by tightening monetary and financial conditions and that also increases the risk of a hard landing instead of a soft one.

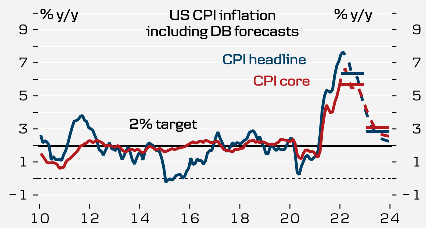
Our new Fed call



Note: Past performance is not a reliable indicator of current or future results.

Sources: Federal Reserve, Macrobond Financial, Danske Bank forecasts

CPI inflation is set to ease but remain very high, especially if the Fed does not tighten monetary and financial conditions



Soucres: BLS, Macrobond Financial, Danske Bank forecasts

Fed will hike by 50bp in March

Based on last week's higher-than-anticipated CPI inflation print and Fed's James Bullard's hawkish comments, we are once again changing our Fed forecasts. We now expect the Fed to deliver a total of 200bp rate hikes this year with a 50bp rate hike in March and 25bp on all following six meetings. 50bp is a large hike but would reflect that the Fed recognises it is behind the curve. The last time the Fed hiked by 50bp was in May 2000. If we are right, the Fed funds target range should be 2.00-2.25% by the end of the year. The timing is difficult and we see risks as skewed towards the Fed front-loading some of the rate hikes by making more 50bp rate hikes.

We expect the Fed to hike three times in early 2023 and go on hold when the Fed funds target range reaches 2.75-3.00%.

We still see risks skewed towards the Fed pulling the emergency brakes by hiking sooner and more forcefully.

Chief Analyst
Mikael Olai Milhøj
+45 45 12 76 07
milh@danskebank.dk

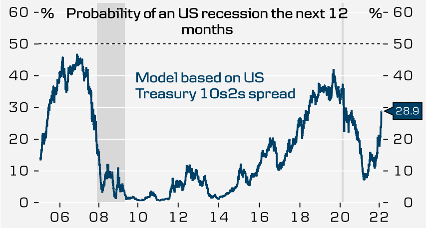
Chief Analyst
Jens Nærvig Pedersen
+45 45 12 80 61
jenpe@danskebank.dk

Markets are currently pricing in a total of 170bp rate hikes this year (corresponding to 6.5 25bp rate hikes). Markets are pricing in around 70% probability of a 50bp rate hike in March. We know by experience that the Fed does not like to surprise markets by underdeliver.

We are not surprised if the Fed announces an early end of QE. We now expect the Fed to start QT in May with a cap between USD100-125bn (from June and USD75-100bn previously).

We see a clear risk of increasing recession fears over the coming 1-2 years due to significant tightening of financial conditions. That is the case both if the Fed reacts very swiftly now or if the Fed gets further behind the curve and tightens much faster in, let us say, the second half of the year. As we expect the Fed to hike more than currently priced, we expect the US yield curve to flatten further and we will not be surprised if the yield curve inverts reflecting high recession fears. The Fed needs to slow demand and reduce inflation fears by tightening monetary and financial conditions and that also increases the risk of a hard landing instead of a soft one. It also means that the "Fed put" is less strong, as the Fed's priority number one is to get inflation under control. Still, a recession down the road would most likely force the Fed to stop hiking further.

US recession fears are on the rise, as the US yield curve flattens



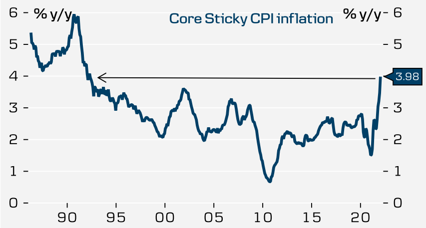
Sources: Macrobond Financial, Danske Bank model

Higher underlying inflation pressure

Admittedly, we have underestimated the underlying inflation pressure for quite some time and despite upward revisions of expectations, inflation continues to surprise to the upside. In January, CPI core rose by 0.6% m/m, which was slightly higher than the 0.5% m/m we pencilled in and above consensus of 0.4% m/m. It is not only "flexible prices", which are increasing, as core sticky CPI inflation is now 4.0% y/y, the highest since April 1992.

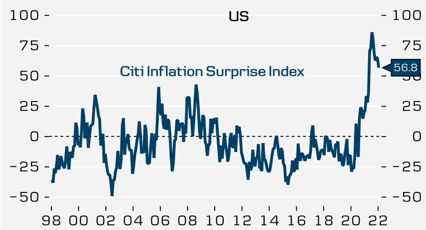
The inflation narrative is very strong and it seems fair to say that inflation is spinning out of the Federal Reserve's control. Short-term consumer inflation expectations are very high and unlike what we saw in 2008 and 2011, the output gap is now closed. Long-term consumer inflation expectations from the University of Michigan are now 3.1%, which is significantly higher than the pre-covid levels but only slightly above the 2004-07 average (which we like to use as a benchmark, as it was a time when the Fed was not at the zero lower bound and did not struggle with too low inflation). We see risks, however, as skewed towards even higher long-term inflation expectations, as consumers react to still increasing actual inflation. Around 50% of all small businesses say they expect to hike prices within the next three months and ISM prices paid remain extraordinarily high. Investors continue to expect high inflation near-term and commodity prices are still rising.

Core sticky price CPI inflation is now 4.0% - the highest since April 1992



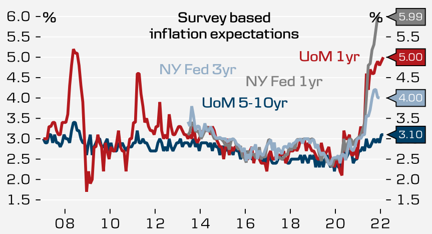
Souces: Atlanta Fed, Macrobond Financial

Citi Inflation Surprise Index remains very high



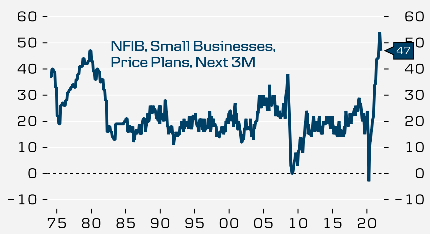
Sources: Citi, Bloomberg, Macrobond Financial

Very high inflation expectations



Sources: University of Michigan, New York Fed, Macrobond Financial

Around 50% of all small businesses still expect to hike prices in coming months



Sources: NFIB, Macrobond Financial

Is the Fed behind the curve? Yes, according to several measures

The big problem right now seems to be that the Federal Reserve is already behind the curve. The fear of tightening too soon (as it was the case with QE tapering and the first rate hike in December 2015) means that the Fed is now getting started to late. Several different measures support this view.

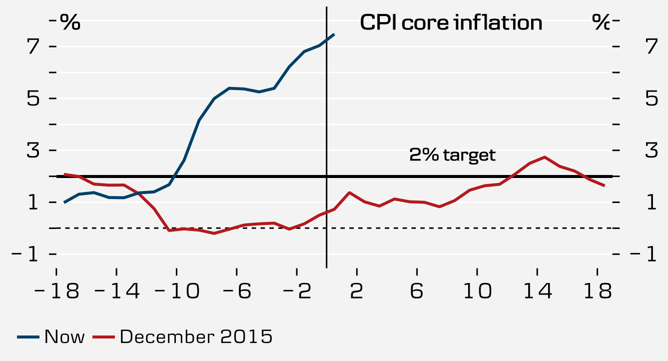
Data

Just by looking at data, it seems like the Federal Reserve is behind the curve. The labour market is extremely tight by many measures with the unemployment rate at 4.0%, very high labour demand and increasing wages. Inflation is the highest in 40 years and inflation expectations are high. As Fed Chair Jerome Powell said during the press conference at the January meeting, the current economic situation is very different from the situation in 2015-18 and hence the hiking cycle is most likely different too. We discussed in further details in *Fed Update: Different economy, different hiking cycle – a comparison with December 2015*, 3 February.

It is also quite clear that the economy is very inflationary when looking at nominal GDP growth, which is significantly higher than before the covid crisis (and nominal GDP is above the pre-covid trend).

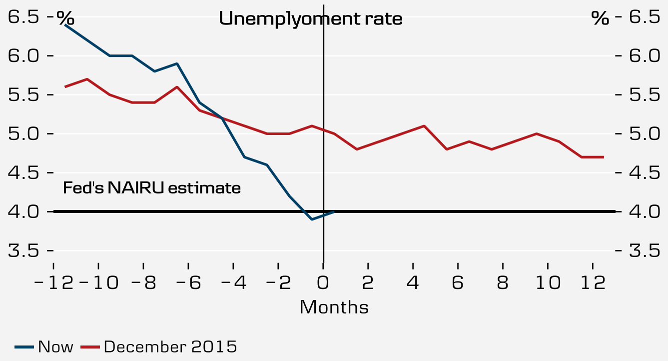
Overall, it is important to keep in mind that the Fed does not need to follow the previous “one rate hike every other meeting” strategy from 2015-18. It is more common for the Fed to tighten at a much faster pace.

CPI core inflation much higher than when the Fed started the most recent hiking cycle in December 2015



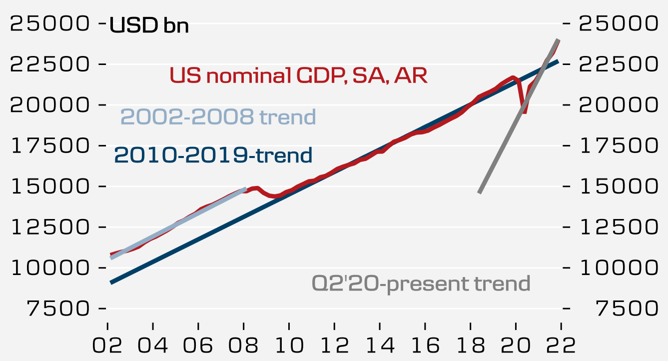
Sources: BLS, Macrobond FInancial

The unemployment rate is already at 4%, which corresponds to the Fed’s NAIRU estimate



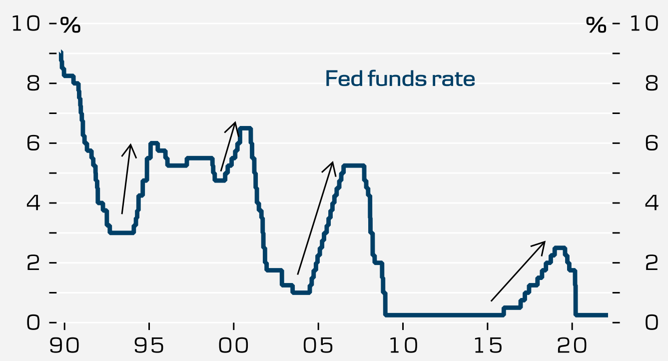
Sources: BLS, Macrobond FInancial

Nominal GDP growth is much higher than before the covid crisis



Sources: BEA, Macrobond Financial, Danske Bank trends

The recent hiking cycle was more gradual than previous hiking cycles



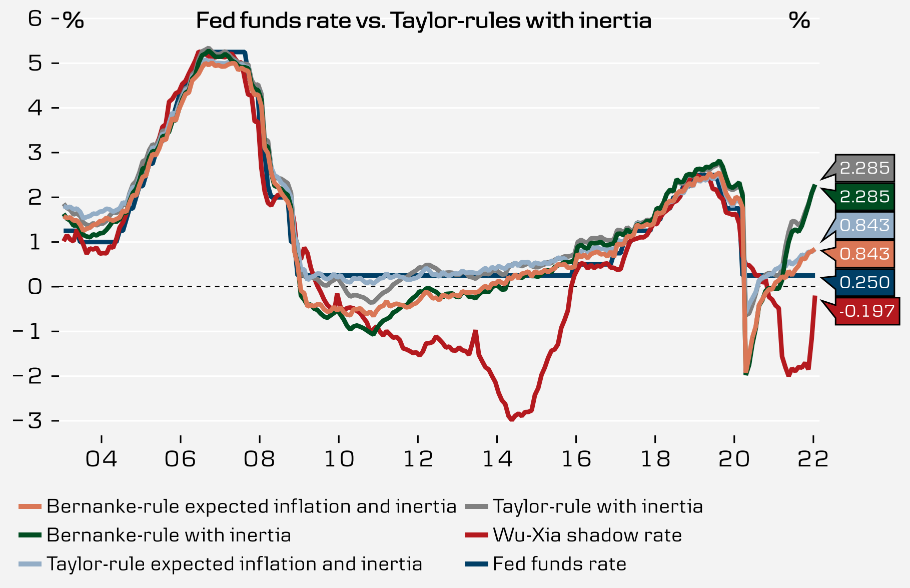
Note: Past performance is not a reliable indicator of current or future results.

Sources: Federal Reserve, Macrobond Financial

Taylor rules

An objective way to translate data into policy actions is to look at different specifications of the Taylor-rule (in the spirit of *Taylor (1993)*). The Taylor-rule is a monetary policy rule describing the appropriate relationship between the policy rate, the natural rate of interest (the equilibrium rate), inflation and output gap. The rule suggests that central banks should tighten monetary policy when inflation is high and the output gap is closed/positive and vice versa. By looking at four different specifications of the Taylor-rule (the original Taylor-rule, the Taylor-rule with inflation expectations instead of actual inflation, the Bernanke-rule (higher weight on output gap) and the Bernanke-rule with inflation expectations instead of actual inflation), we find that the Federal Reserve is behind the curve based on all four models. We look at the Taylor-rule including inertia (i.e. taking into account that the Fed usually conducts monetary policy more gradually than suggested by the original Taylor-rule) and core inflation instead of actual inflation (in order to remove commodity and food prices). We find that the Fed is at least 60-110bp behind the curve already (60bp by just looking at the current upper level of the Fed funds target range of 0.25% and 100bp by looking at the so-called shadow rate which tries capturing the QE effect) when looking at the two rules with inflation expectations, as long-term inflation expectations have not increased as much as CPI core inflation. When looking at the two rules with CPI core inflation, the Fed is 200-250bp behind the curve.

Taylor-rules: The Fed is at least 60-110bp behind the curve already

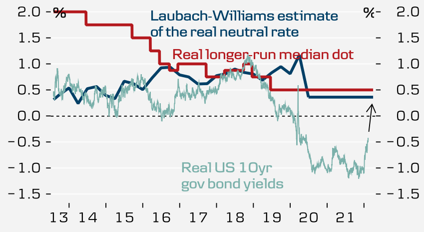


Note: Past performance is not a reliable indicator of current or future results.
Sources: Federal Reserve, BLS, University of Michigan, University of Chicago, NY Fed, Bernanke (2015), Taylor (1993), Macrobond Financial and Danske Bank estimations

Financial conditions

Despite markets are now pricing in several Fed rate hikes, financial conditions remain very easy in a historical perspective and commodity prices continue to rise. In our view, the Fed needs to tighten financial conditions in order to slow down demand and ease underlying inflation pressure. The Fed may very well have to follow the "emerging markets central bank" playbook, as central banks in Poland, Czech Republic, Hungary and Russia have hiked significantly (and even outpacing expectations) in order to get inflation under control and show credibility. We also think it is quite clear when looking at the real interest rate gap, as real interest rates remain lower than both the Laubach-Williams estimate (assuming it was unchanged during the covid crisis) and the Fed's own longer-run median dot adjusted for inflation.

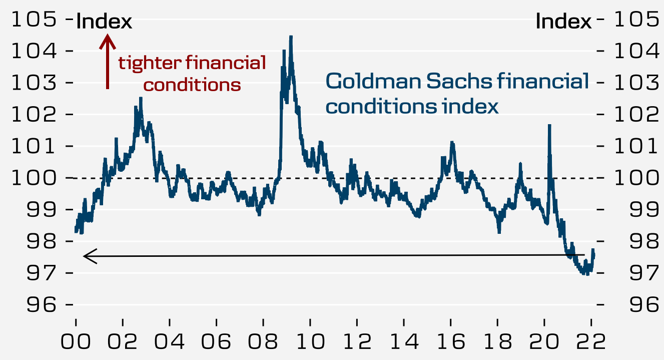
The Fed needs higher real interest rates



Note: Past performance is not a reliable indicator of current or future results.

Sources Laubach-Williams, Bloomberg, Federal Reserve, Macrobond Financial

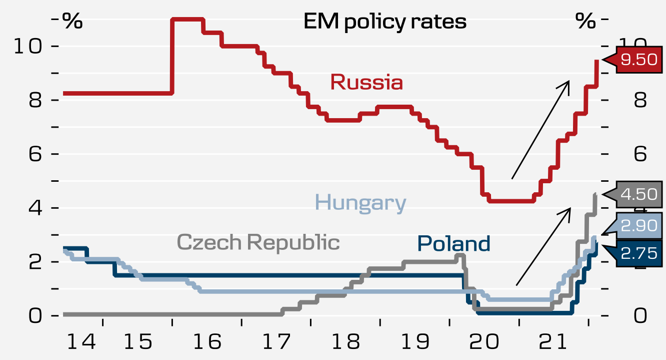
Financial conditions remain very easy



Note: Past performance is not a reliable indicator of current or future results.

Sources: Goldman Sachs, Bloomberg, Macrobond Financial

Higher policy rates in emerging markets because of high inflation



Note: Past performance is not a reliable indicator of current or future results.

Sources: National central banks, Macrobond Financial

Intermeeting rate hikes are rare

Intermeeting interest rate cuts are part of Fed's tool kit when crisis hit, but intermeeting interest rate hikes are rare. In general, Fed values smoothing policy changes more when tightening compared to easing cycles. A tightening cycle is a balancing act, where Fed seeks to avoid the economy falling into a recession, while recession is looming when Fed cuts interest rates, which makes it easier to throw everything on the table.

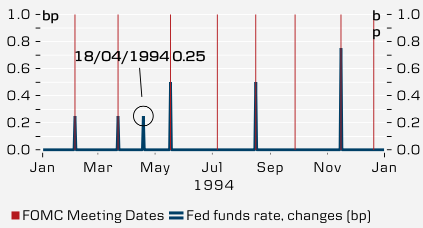
On 18 April 1994, Fed hiked 25bp between meetings to speed up its hiking cycle, which was already under way. Then Fed was set to raise the Fed Funds target at the upcoming May meeting, but felt it was appropriate to move faster. Hence, an intermeeting hike has happened before albeit it was a different chair and a different time. It was also during the hiking cycle and not at the onset.

Intermeeting rate hikes were less rare in the late 70's and early 80's when Paul Volcker was chair and he fought against very high inflation. Monetary policy has changed significantly since then, as central banks now prefer to be more predictable and transparent.

An intermeeting hike now would be a bold move in our view even if the economy needs higher interest rates. It would likely further lead the market to price a chance of intermeeting rate hikes further out the curve – probably after CPI release dates.

We also think investors misinterpreted the comments from St. Louis Fed President James Bullard (see some of his comments in the table on the following page), which started the speculations. Although he says that he favours tighter policy already now, he seems more

The last intermeeting rate hike was on 18 April 1994



Note: Past performance is not a reliable indicator of current or future results.

Sources: Federal Reserve, Macrobond Financial focused on what the Fed will do on the March meeting (25bp or 50bp) and how high the Fed funds target range is by July. Bullard also mentions that intermeeting rate hikes are rare.

Overall, it seems unlikely that the Fed will hike ahead of the official March meeting, also taking into account that some of the more dovish/neutral FOMC members are seemingly not supporting a 50bp rate hike in March. The Fed may, however, announce an immediate end of QE, which would be a strong signal that the Fed recognises the need of tighter monetary policy.

Bullard interview

Q. You would defer to the chair on whether to go 25 basis points or 50 in March -- you would be willing to consider either?

Bullard: "Yeah, I would be willing to consider that. Like I said, there was a time when you would just take a situation like this and you would just meet today, off cycle. The logic of that might be -- well, the first 25 is already totally baked in by markets. It is only a question of whether you would go the other one, the other 25 or not."

"So why don't you just go ahead and do that instead of letting it sit out there? I have some sympathy for that. **But the committee hasn't moved inter-meeting in a hawkish direction for quite a while. So I don't know if the chair would want to entertain something like that**. We have also wanted to finish the asset purchases. Some people on Wall Street have said, 'Why don't you just end the asset purchases now and go ahead with the rate increase?' People said that about the January meeting."

Q. Would you favor an inter-meeting increase? You have moved inter-meeting before, during Covid obviously.

Bullard: "Oh yeah. The committee does meet inter-meeting and again I think we should be nimble and considering that kind of thing. **For now, I think we are mostly focused on the March meeting.**"

Q. One hundred basis points by July 1 would imply one 50 basis-point move at one of three meetings and two quarter-point moves.

Bullard: "Yes. I think that is right. I supposed you could do it a lot of different permutations and combinations. **That is just a general sense of where I would like to be.** Also on the balance-sheet runoff, I think we need to get going on that now, in the second quarter."

"If we did it the way I'm describing and got to mid-year, then the policy rate would be 113 basis points and the balance sheet would be running off. You could argue between those two things you are not very far from neutral at that point."

"We are certainly removing accommodation on both dimensions of our policy. Then, suppose you saw substantial moderation in inflation in some of the reports during the spring, you might be pretty comfortable with those settings given that inflation is falling pretty dramatically at that point and you could be, let's say, deliberate in the second half of the year and into 2023 depending on the situation."

"If inflation is not falling at that point and is stubbornly high, then you could take more actions in the second half of the year. That's what I am thinking."

Sources: Bloomberg

Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report are Mikael Olai Milhøj, Chief Analyst and Jens Nærvig Pedersen, Chief Analyst.

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