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## Macro vs financial stability

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- Risk indicators have risen in recent weeks amid the latest banking crisis, but still point to looser than average financial conditions. An increase in risk aversion can lead to a lower neutral rate, and therefore a lower terminal rate, but these conditions have not been met yet. The Fed’s latest 25bps hike falls in line with their fight against inflation and will likely not undermine financial stability.
- Underlying inflation is still running hot. Excluding outliers, the level of price growth is larger than previously thought and the disinflationary trend is slower. With the latest interest rate hike and fallout from the banking crisis, credit indicators are poised to tighten but the impact may not show up in the data until weeks or months later.

### Rising risk aversion can lead to lower rates, but conditions are not there yet

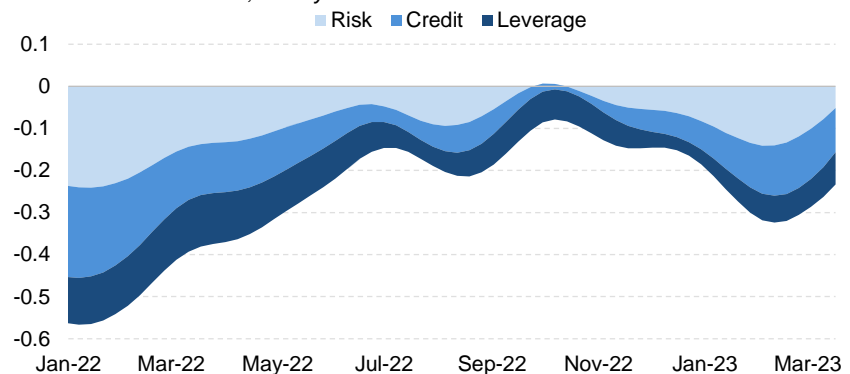
Uncertainty in the banking sector has driven up risk premiums in recent weeks, and overall financial conditions have tightened slightly in response to the increased volatility. However, the economy is still far from widespread financial instability.

The Chicago Fed’s National Financial Conditions Index (NFCI) ticked up to -0.24 for the week ending March 17, capturing the immediate fallout from the collapse of Silicon Valley Bank and the insolvency of Signature Bank and Credit Suisse. But even so, financial conditions remain loose by historical standards.

The NFCI is a weighted average of 105 indicators of risk, credit, and leverage in the financial system. Positive values indicate that financial conditions are tighter than on average historically, negative values indicate looser financial conditions, and a zero value indicates the US financial system operating at historical levels.

### Risk indicators are tightening but financial conditions are still looser than average

Contributions to the NFCI, weekly



Note: The NFCI has an average value of zero and a standard deviation of one over a sample period extending back to 1971.  
 Source: Chicago Fed, MUFG Bank Economic Research

By comparison of today’s values, the NFCI averaged -0.62 in August 2006 when the Federal Funds Rate last peaked at 5.25 prior to the 2008 financial crisis. The index eventually rose to an average of 0.64 by August 2007, just 4 months before the start of

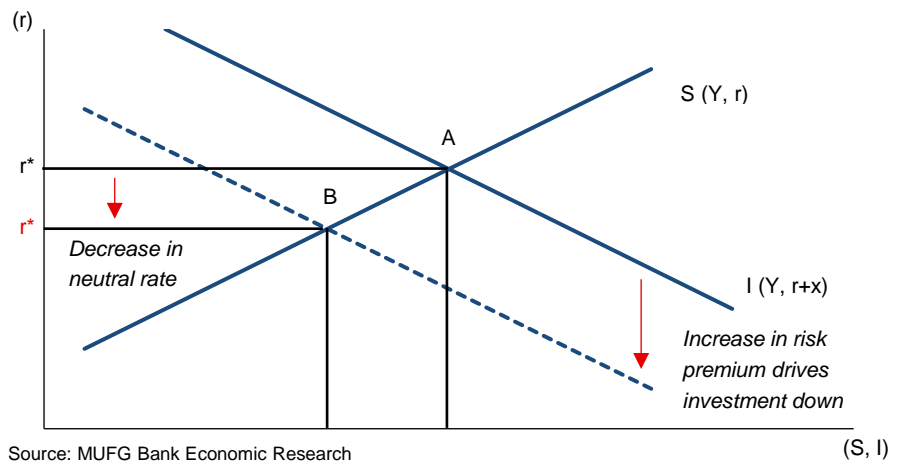
the Great Recession. Today's values indicate tighter financial conditions than in 2006, but looser than in 2007.

Lately, the greatest drivers of tightening financial conditions have been risk indicators. In the NFCI, risk is defined as the premium placed on risky assets embedded in their returns as well as the volatility in asset prices. Levels have tightened since the Fed began raising rates but have remained loose relative to historical standards (indicated by the negative contribution), especially if compared to the weeks leading up to the 2008 financial crisis. For the week of March 17, risk indicators tightened slightly, contributing -0.05 to the NFCI index, up from -0.08 in the week prior. Though trending upward, this latest tightening still has risk levels lower than just 5 months ago in October 2022.

The uncertainty lies on whether there will be a lasting impact from the bank crisis fallout. As it stands now, financial conditions are set to gradually tighten, but are still far from being overly restrictive. Risk and risk aversion are particularly key to understanding how the Fed may conduct monetary policy for the remainder of this year.

From a monetary policy perspective, the economy can be viewed through the lens of safe and risky rates to determine the neutral rate or the rate at which monetary policy is neither expansionary nor contractionary. The equilibrium of savings and investment in the economy determines the neutral rate ( $r^*$ ). Savings is dependent on income ( $Y$ ) and safe rates ( $r$ ), which can be thought of as government bonds. Investment is also dependent on income ( $Y$ ), but also on the safe rate ( $r$ ) plus the risk premium ( $x$ ).

**Increase in risk premium will drive the neutral rate lower**



Source: MUFG Bank Economic Research

In today's environment of uncertainty (both from the latest banking crisis and looming recession fears) and rising interest rates, the risk premium has certainly risen as banks, businesses, and consumers become more risk averse. This has the potential to drive investment down, bringing and the equilibrium with savings and the neutral rate down. A lower neutral rate would translate to a lower terminal rate that the Fed must achieve to make monetary policy sufficiently restrictive to bring down inflation.

Questions remain as to whether this rise in risk aversion and subsequent risk premiums has been substantial enough to lower the neutral rate in the short run. As of now, inflation is running well above the Fed's target and the trend is not falling fast enough. On this alone, a 50bps hike would have seemed most appropriate from the Fed. However, there may be an increase in risk aversion from the banking crisis that has yet to be fully realized, despite current risk indicators still indicating looser than average financial conditions.

The latest 25bps hike seems to be a compromise where the Fed sees the economy as having not reached a sufficiently restrictive terminal rate yet, but also considering an increase in risk aversion that is bringing the neutral rate lower. The next few weeks and months will offer insight into how much additional risk aversion the banking crisis will add and whether the impact will be sustained throughout 2023 or if it will be short lived.

**Latest crisis may be disinflationary, but the magnitude of the impact is unknown**

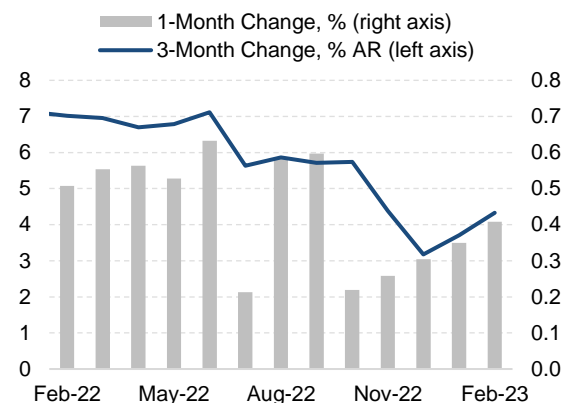
Underlying inflation is still running hot. Core inflation (inflation excluding food and energy) has traditionally been used to gauge underlying price growth, but significant outliers are clouding just how elevated inflation is. Shelter contributed heavily to February’s acceleration, but some of that was counterbalanced by falling used car and truck prices.

Looking at “super-core” prices, excluding both shelter and used autos, annual CPI growth cooled slightly to 5.3% in February, down from 5.4% in January. However, “super-core” inflation has accelerated for 5 straight months on a 1-month growth basis and for 3 straight months on a 3-month annualized growth basis.

Determining the underlying price growth trend has led to this subset view of “super-core” inflation where shelter and used autos are treated as outliers. To further exclude outliers, the Cleveland Fed developed the 16% trimmed-mean measure of annual CPI growth, excluding additional price changes in specified upper and lower tails of the distribution. Using this measure, annual CPI growth is much higher at 6.47% in February, virtually unchanged from 6.55% in January.

**Underlying inflation has accelerated**

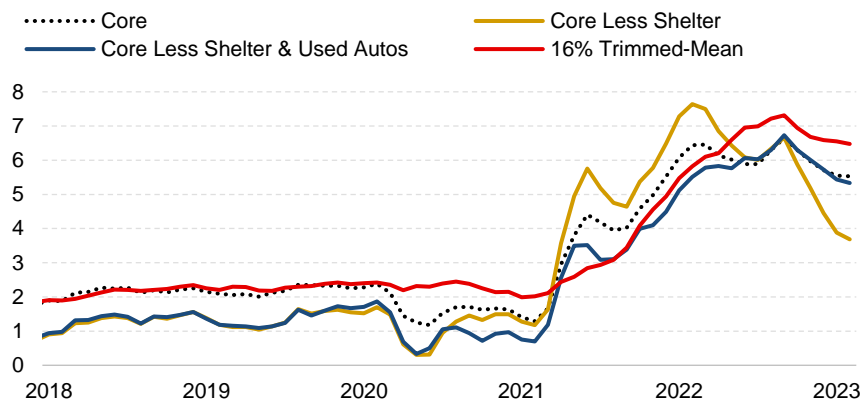
Core CPI less shelter and used autos



Source: BLS, MUFG Bank Economic Research

**Annual inflation, excluding outliers, is still running hot**

Annual CPI growth, %



Source: BLS, Cleveland Fed, MUFG Bank Economic Research

Rising interest rates have so far been only mildly successful at slowing official measures of price growth (CPI and PCE), but the banking crisis may add to disinflationary pressures by restricting credit beyond interest rates through an increase in lending standards. Banks may begin to offer shorter lines of credit, decrease the quantity of qualifying loans, or have fewer offers for consumers and businesses as their aversion to risk increases.

Rising interest rates work by increasing the cost of borrowing, thus lowering demand for credit, and subsequently reducing the amount of money circulating in the economy. Increased lending standards don’t necessarily increase borrowing costs directly, but rather, they make it harder to receive that same credit at prevailing rates. This reduces the supply of credit and the amount of money circulating in the economy. Both interest rates and lending standards work to reduce the amount of money in the system, the mechanism by which is expected to slow price growth.

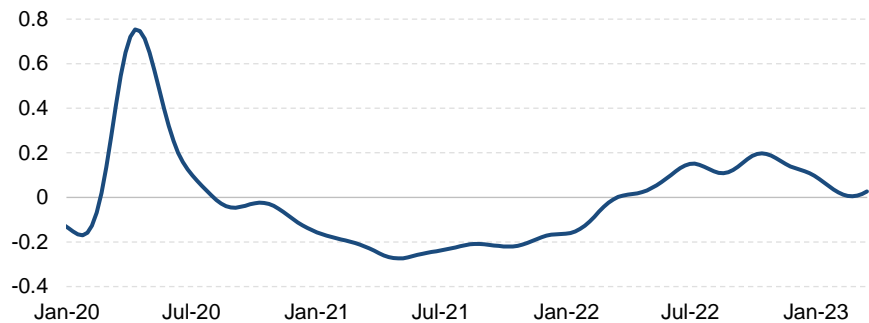
Regional banks, in particular, are being incentivized to hold more liquidity for fear that the contagion will dwindle deposits. In turn, credit will be tightened as the willingness to loan shrinks.

Though, we may not know the extent of the impact for another couple of months. Credit indicators from the Chicago Fed's NFCI track the willingness to borrow and lend at prevailing prices, but they tend to be lagging indicators of financial stress. Stress in financial conditions show up in real time through risk indicators, but credit indicators tend to lag financial conditions. Nevertheless, credit conditions have tightened in the last 2 weeks ending on March 17 with the NFCI credit subindex increasing slightly.

Credit will likely further tighten in the coming weeks from the fallout of the collapse of SVB, Signature Bank, and Credit Suisse. If the impact proves to be more than just transitory, it will likely have a disinflationary impact on prices and potentially a negative impact on the labor market. And since the credit crunch is likely to be concentrated in regional banks, small to medium sized businesses will feel the impact first.

### Credit indicators are likely not tight enough just yet

*NFCI, credit subindex*



Note: The NFCI has an average value of zero and a standard deviation of one over a sample period extending back to 1971

Source: Chicago Fed, MUFG Bank Economic Research

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