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How sticky will inflation be?

Core services inflation is proving sticky amid tight labour markets, strong wage growth, and higher inflation expectations. We think the recessions in developed markets we are forecasting are ultimately necessary to bring underlying inflation to target-consistent rates. We lay out the theory behind sticky inflation, and the key waymarks to watch.

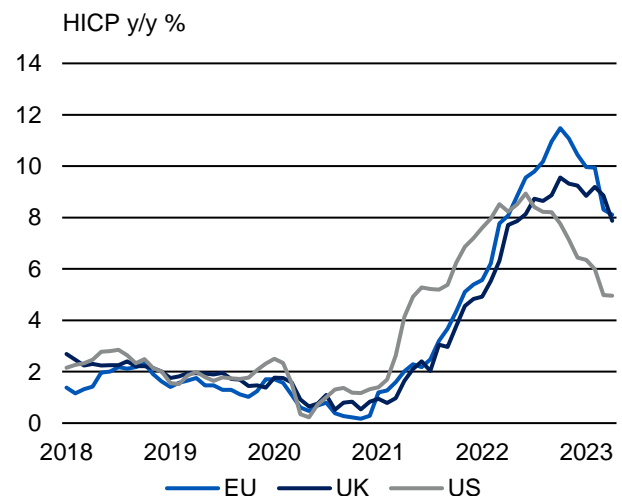
Key Takeaways

- Global headline inflation has started to ease and supply chain disruptions have broadly cleared. But core services inflation remains stubbornly high in a number of countries.
- The pandemic revealed a steeper part of the Phillips Curve, which is why inflation rose so high so quickly. But inflation could also decline rapidly without much damage to growth if the Phillips curve remains steep.
- However, the prolonged period of high inflation may be altering price-setting behaviour as firms and workers try to make up for past inflation. This could give inflation a momentum that is harder for central banks to tame.
- Tight labour markets, strong wage growth, and inflation expectations still above pre-pandemic norms are all contributing to the resilience of underlying core services inflation.
- Indeed, monitoring these waymarks convinces us that only an eventual economic downturn can now bring underlying inflation back to target-consistent rates.

The facts: headline inflation is falling but underlying inflation is still high

Global headline inflation has started to decline as pandemic and war-related drivers unwind and base effects push down on year-over-year comparisons (see Figure 1).

Figure 1: Headline inflation starting to inflect lower



Source: abrdrn, Haver, May 2023

Energy prices stabilised as demand concerns outweighed supply constraints. Price growth is moderating in global goods markets as freight costs, port congestions, delivery times, and the supply of key intermediate inputs have improved. The Fed's Global Supply Chain Pressure Index fell below its historical average, pointing to a continued deceleration in goods and manufacturing input prices (see Figure 2).

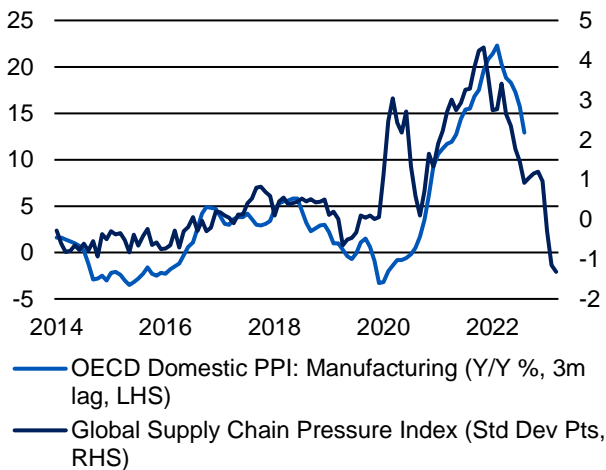
Agriculture prices have declined 30% since last year's peak and have started to feed into weaker food inflation across the US, Latin America and emerging Europe (see Figure 3).



Interventions and price caps distort the pass through of wholesale food prices in Asia, but overall global food inflation fears have receded.

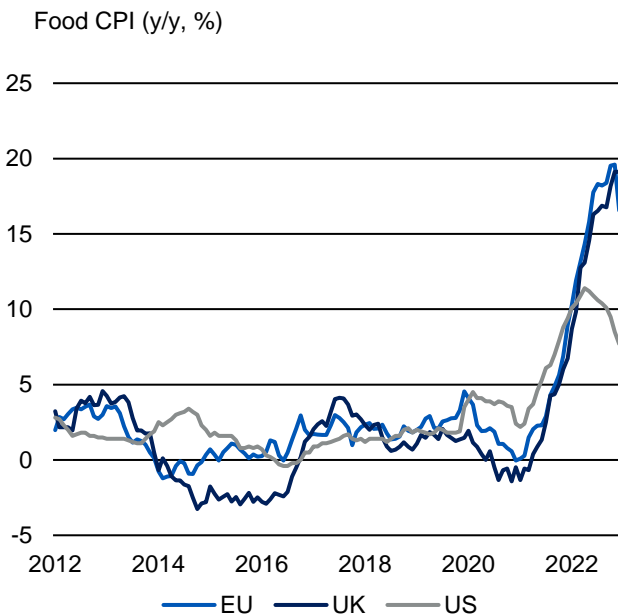
The UK stands out as an exception for now, as firms try to rebuild margins following a period of accommodating the surge in wholesale food prices. Meanwhile some suppliers entered long-term contracts at the highs of various commodity prices, so their cost structure remained elevated.

Figure 2: Supply chain improvements are pulling goods price growth lower



Source: abrdrn, Haver, May 2023

Figure 3: Decline in wholesale agriculture prices lowering food inflation, but the UK is an exception

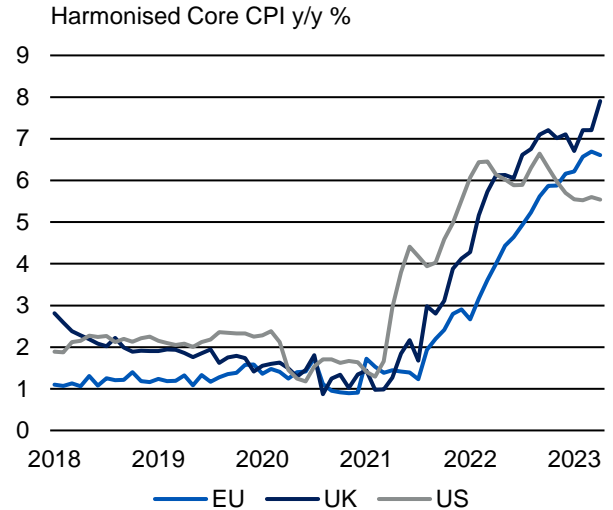


Source: abrdrn, Haver, May 2023

However, core inflation – and services inflation in particular – is proving more persistent in a number of countries amid tight labour markets (see Figure 4).

Central banks will be watching services inflation closely as it provides the best read of underlying pressures in the economy. These are ultimately determined by labour market dynamics and inflation expectations, which are heavily influenced by monetary policy, and have shown fewer signs of slowing, which could result in sticky inflation.

Figure 4: Tight labour markets are reflected in stubbornly high core inflation



Source: abrdrn, Haver, May 2023

The risks: sticky inflation and “two bites of the cherry”

In our base case, cumulative monetary policy tightening causes a recession across much of the developed world around the turn of the year. This is unfortunately necessary to restore price stability, with the associated output gap caused by the downturn sufficient to bring core inflation down in 2024. This in turn allows monetary policy to ease significantly to counter the recession.

However, it is possible inflation proves even more persistent than we expect, either through activity remaining stronger in the near term or, worse, through inflation proving less responsive to weak activity even in a recession. Among our full distribution of alternative scenarios, these two stand out:

- **The Fed has two bites of the cherry** – both growth and inflation remain resilient in the face of tighter monetary policy. As the Fed and other central banks realise that underlying inflation is showing little sign of returning to target, they are forced to tighten policy considerably further to generate sufficiently disinflationary forces. This pushes the economy into a later recession.
- **Sticky inflation** – the Fed’s monetary tightening is sufficient to cause a recession and higher unemployment. However, core inflation pressures remain elevated as persistently high inflation has altered wage and price-setting decisions, making inflation less responsive to economic slack.



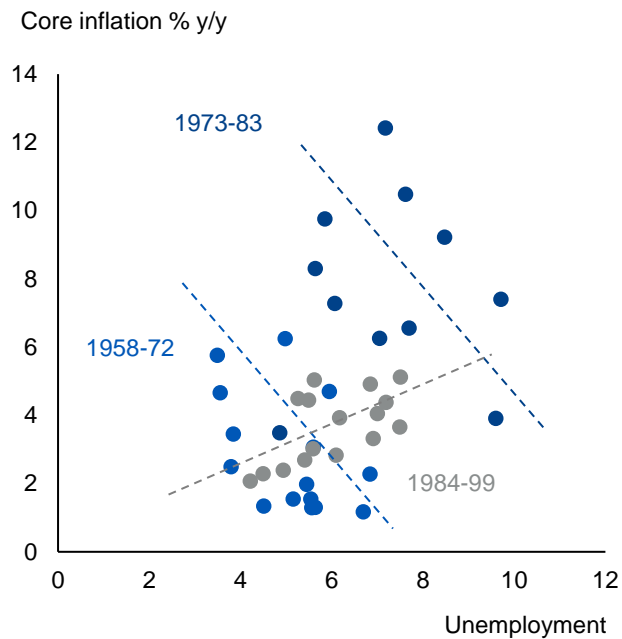
This results in a delayed cutting cycle as the Fed and other central banks prioritise tackling inflation despite rising unemployment, with rates troughing at a lower level.

At the margin, the run of resilient growth data and still-high core inflation prints have increased the probability of these scenarios materialising. In what follows, we explain why inflation may remain sticky, and the waymarks to watch for these scenarios to become base case.

The theory: Phillips curves, policy trade-offs, and the formation of inflation expectations

The responsiveness of inflation to economic slack depends on the shape and position of the Phillips curve. Figure 5 tracks the evolution of the US Phillips curve from the late 1960s to late '90s. Intuitively, when unemployment is high, workers have limited bargaining power, keeping wage growth weak, which in turn keeps inflation low. This would imply a downward sloping curve in core/unemployment space.

Figure 5: The 1970s inflation involved a shift in the Phillips curve as expectations became unanchored



Source: abrdrn, Haver, May 2023

However, at first glance the raw data in Figure 5 seem to trace out an upward sloping relationship, where higher unemployment is associated with higher inflation. That's because the data is best thought of as representing three different Phillips curves corresponding to three different periods.

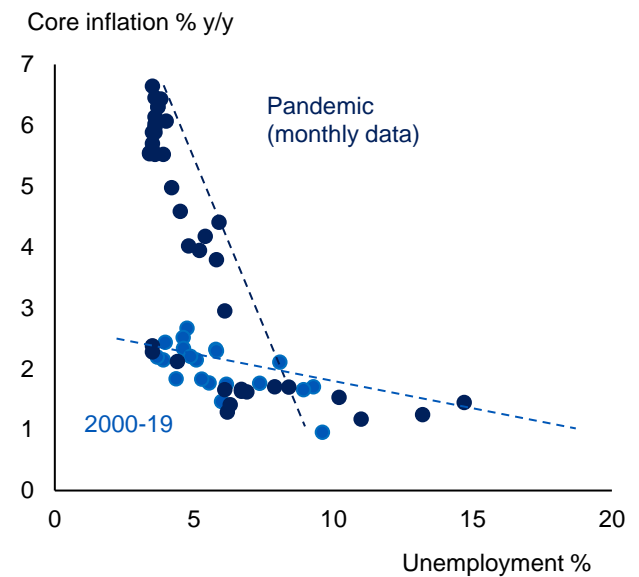
Put another way, it is not only the shape of the Phillips curve that matters, but also its *position*. Shifts in position reflect the changing structure of the economy and crucially inflation expectations.

For example, in the 1960s and '70s, economic policy prioritised low unemployment over low inflation. This caused households and firms to adjust inflation expectations higher, triggering higher wage and price demands, which both spiralled higher. The Phillips curve shifted outwards so that the inflation rate was higher for any given level of unemployment between 1973 and 1983.

Aggressive monetary tightening was then required to demonstrate a credible commitment to keeping inflation low, causing a period of elevated unemployment. The degree of unemployment that was 'necessary' to restore price stability was higher than it otherwise might have been because expectations needed to be reset.

Bringing the story up to present, Figure 6 traces the Phillips curve from 2000 to today.

Figure 6: The economy's behaviour through the pandemic seems to have revealed a steeper part of the Phillips curve



Source: abrdrn, Haver, May 2023

The combination of anchored inflation expectations and structural trends such as globalisation and technological change kept the Phillips curve low and flat between 2000 and 2019.

But the impacts of the pandemic and Ukraine war pushed the economy to a very steep part of the Phillips curve.

If the economy remains on this very steep Phillips curve as monetary policy tightening bites and unemployment starts to increase, then inflation should fall rapidly. Only a relatively modest downturn would be required to get inflation back to target.

However, if the Phillips curve has once again shifted outwards, inflation will be higher for any given level of output and unemployment. This will require a deeper recession to bring it under control.



In the near term this would appear as inflation remaining elevated for longer, but in time would lead to monetary policy being much tighter than our forecasts, generating a deeper recession.

Given the importance of inflation expectations in determining the position of the Phillips curve and the likelihood of inflation proving more persistent, [we researched how inflation expectations might be formed.](#)

The way in which they are formed can change over time, with individuals and firms shifting between backward- and forward-looking behaviour, depending on the structure of the economy.

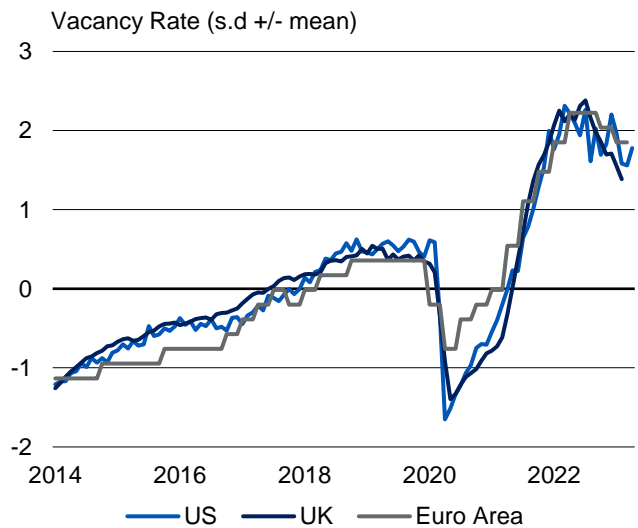
A period of elevated inflation can make price setting more backward looking. This can give inflation a momentum that makes it hard to squeeze out. In other words, the Phillips curve may be steep with inflation going up, but flat with inflation going down.

The practice: waymarks to watch

The key indicators to watch for signs of greater inflation persistence relate to labour market tightness, wage growth, and inflation expectations.

Figure 7 shows vacancy rates in the US, UK, and Eurozone have stabilised but remain well above pre-pandemic levels. Labour markets are loosening, but remain too tight for inflation to reach targets.

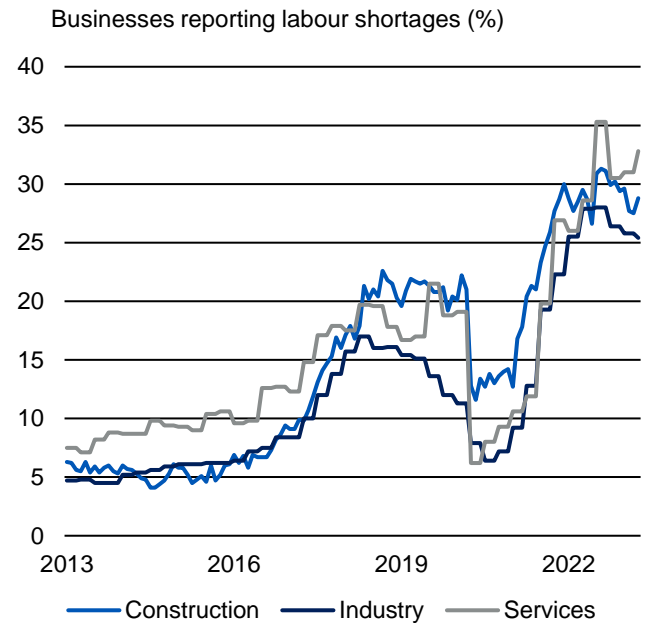
Figure 7: Labour demand is still stretched relative to the pool of unemployed



Source: abrdn, Haver, May 2023

In Europe, labour shortages have started to recover in construction and industry – but remain elevated – while services shortages seem to be increasing again (see Figure 8). Given the importance of services inflation in driving the underlying measure, this will be of some concern to the ECB.

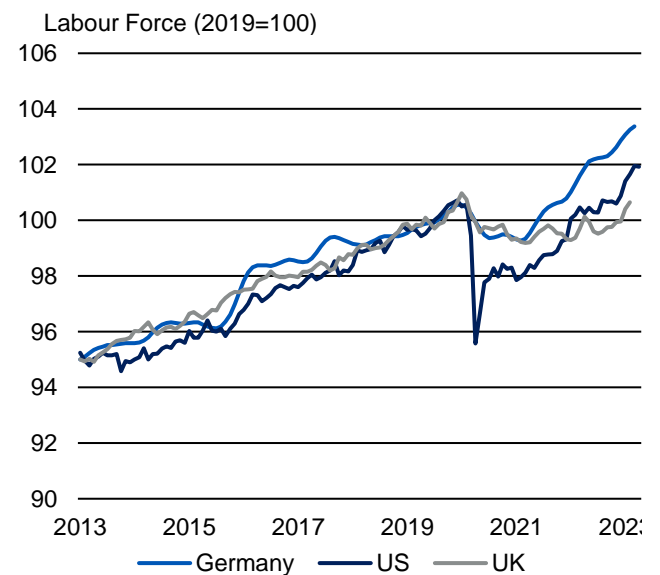
Figure 8: EU labour shortages are broad-based and showing only tentative signs of easing



Source: abrdn, Haver, May 2023

The labour force participation rate has recovered in the US and much of Europe but remains very weak in the UK (see Figure 9). The rise in activity seems to reflect early retirement patterns and the impact of elevated long-term sickness – trends which are both difficult to reverse quickly. This weak participation helps to explain the UK's very high inflation despite the fact that activity remains below the pre-pandemic level, and may make returning inflation to target harder.

Figure 9: Labour supply has not yet recovered in the UK, making it particularly susceptible to stagflation

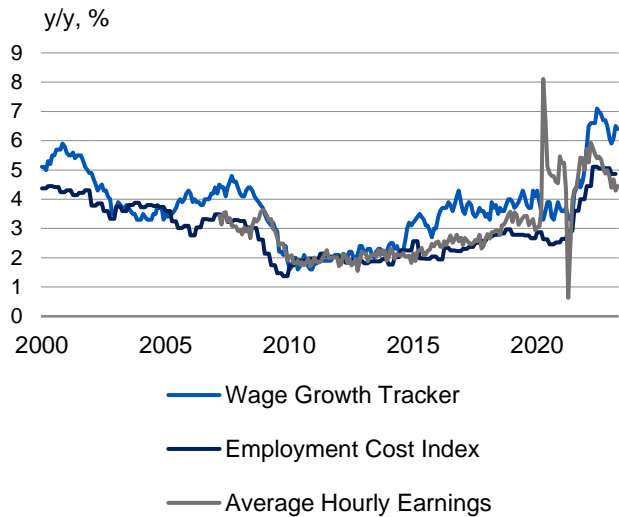


Source: abrdn, Haver, May 2023



Wage pressures remain high in many countries. In the US, average hourly earnings growth reaccelerated in April, while composition-adjusted measures remain elevated (see Figure 10).

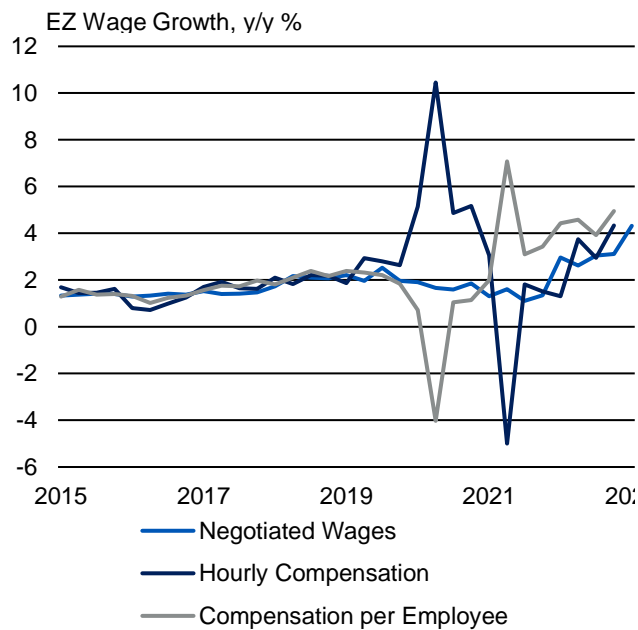
Figure 10: US wage pressures are moderating but remain elevated



Source: abrdrn, Haver, May 2023

In the Eurozone, wage pressures across a number of different metrics show no sign of losing steam (see Figure 11). Without a significant improvement in productivity growth, wage growth remains far too strong for target-consistent inflation.

Figure 11: Eurozone wage are pressures still increasing

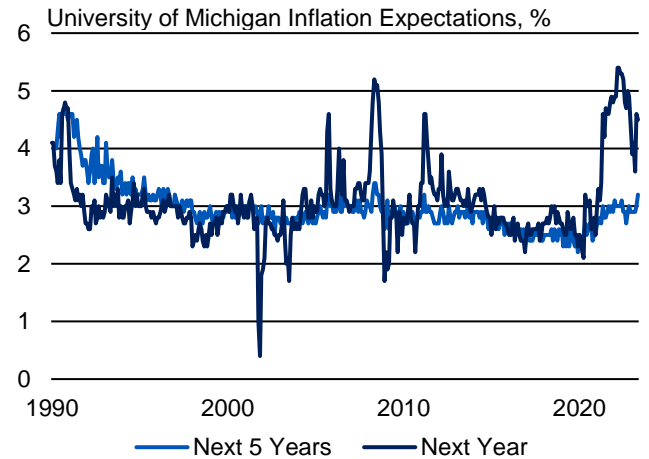


Source: abrdrn, Haver, May 2023

So far, medium-term inflation expectations remain anchored in most countries. In the US, 5-year inflation expectations

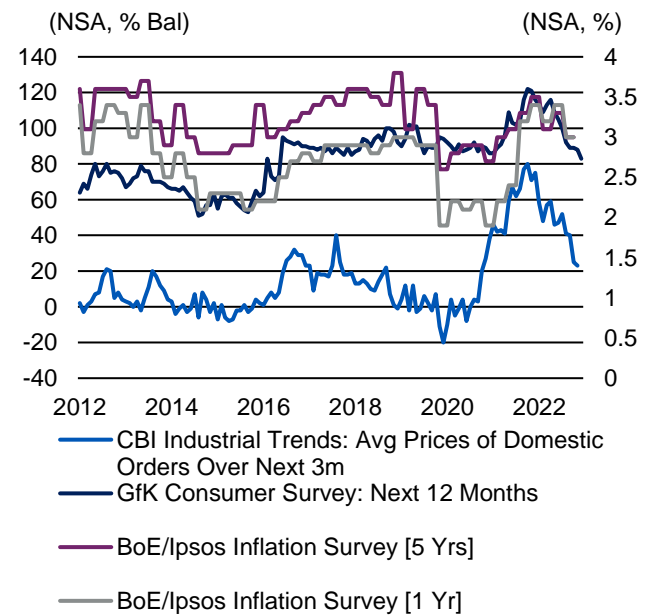
have edged to the upper end of the range seen in the past 25 years but still look anchored (see Figure 12). However, one-year expectations have shot back up again. In the UK, a range of household and corporate surveys shows a marked improvement in the inflation outlook, consistent with faith in central bank policy (Figure 13).

Figure 12: US 1-year inflation expectations have ticked up again, but long-term expectations remain anchored.



Source: abrdrn, Haver, May 2023

Figure 13: UK inflation expectations are easing



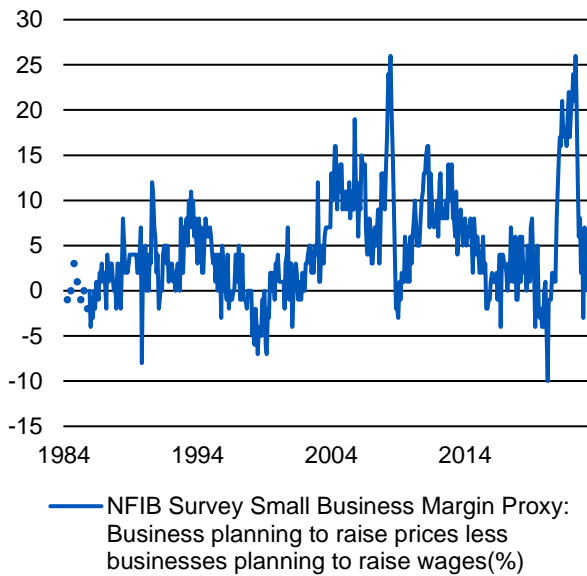
Source: abrdrn, Haver, May 2023

Evidence of “greedflation” is mixed, outside a few sectors. Figure 14 provides a margin proxy for US small business, which has fallen back. But if the backdrop of high inflation and resilient growth continues, firms will assume more generous wage increases can be easily passed on and push through larger price increases.



This could then develop into a wage-price spiral that would keep inflation sticky.

Figure 14: Margins look set to be squeezed



Source: abrdrn, Haver, May 2023

Authors

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The implication: sticky inflation necessitates recession

The upshot of the theory and evidence we've reviewed is that underlying inflation will remain sticky unless and until there is a broader macroeconomic downturn that loosens the labour market and sets expectations lower.

We remain concerned about two key risks. First the near-term path for underlying inflation and the scale of additional central bank rate hikes that may be required. Second, the damage of the "necessary" recession that ultimately brings this inflationary pressure to heel.



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