EDITORIAL

GLOBAL: INFLATION PERSISTENCE AND WHY IT MATTERS

Elevated inflation has become widespread. It raises the risk of further price increases because companies may be more inclined to raise prices when most others are doing the same. This would make high inflation more persistent, implying that it would take more time for inflation to converge back to target. Persistently high inflation could weaken the credibility of the central bank and cause an un-anchoring of long-term inflation expectations. To pre-empt such a development, monetary authorities could decide to tighten policy aggressively. Research by the Federal Reserve shows that US inflation has become more persistent. This helps to understand the increasingly hawkish rhetoric of Federal Reserve officials and their insistence on the need to frontload monetary tightening. The ECB is also monitoring inflation persistence closely. This could mean that, depending on the data, the first rate hike could come sooner after all, even as early as July.

Elevated inflation has become widespread. In the US, different measures of core inflation have increased significantly and are all well above the Federal Reserve's 2% target (chart 1). In the Eurozone, the percentage of items of the harmonized index of consumer prices (HICP) with annual inflation above 2% has seen a spectacular increase (chart 2). There is no indication that this situation will change in the near term. The Federal Reserve's April beige book mentions that "*Inflationary pressures remained strong since the last report, with firms continuing to pass swiftly rising input costs through to customers... Firms in most Districts expected inflationary pressures to continue over the coming months*[1]." The ECB's latest monetary policy statement noted that "*Energy costs are pushing up prices across many sectors. Supply bottlenecks and the normalisation of demand as the economy reopens also continue to put upward pressure on prices*[2]". When assessing the implications of these observations, a distinction should be made between broad-based inflation and persistent inflation. The former concerns the number of items in the consumer price index that share a given inflation development. This number can be high because several shocks occur more or less simultaneously, e.g. commodity price increases alongside supply disruption. To the extent that these shocks are one-off events, their *direct* impact on inflation should be temporary, even in case of a permanent price increase[3]. However, in all likelihood, these shocks will also have *indirect* effects as they are transmitted through the supply chain. This process takes time because not all companies that are facing higher input costs will raise their sales prices at the same time. This staggered price adjustment creates inflation persistence, a phenomenon of inertia whereby the latest inflation data are highly correlated with the pace of price changes in the previous months. It is "*the tendency of inflation to converge slowly towards its long-run value following a shock which has led inflation away from its long-run value*[4]."

Several factors can explain inflation persistence[5]. A succession of shocks, persistence in the variables that underpin the inflation process –e.g. a large positive or negative output gap-, staggered price and wage adjustment[6] –a phenomenon called intrinsic inflation persistence[7] - and actions and communication by the central bank. Concerning this last point, research shows that the introduction of inflation targeting has reduced the persistence of inflation.[8]

MEASURE OF CORE INFLATION (Y/Y %) IN THE US

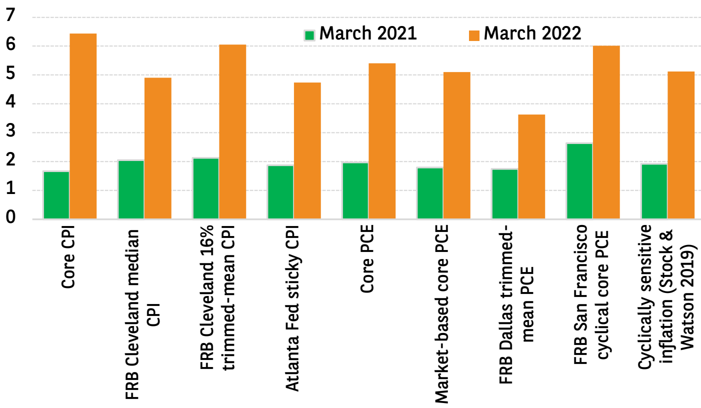

CHART 1

SOURCE: FEDERAL RESERVE BANK OF ATLANTA

1. Source: Federal Reserve, *The Beige Book*, April 2022.
2. Source: ECB, *Combined monetary policy decisions and statement*, 14 April 2022.
3. To illustrate this point, a one-off, permanent increase in the price of oil in a given month will cause an increase in the annual inflation during twelve months. Thereafter, this oil price effect disappears from the annual inflation numbers due to a base effect.
4. Source: Filippo Altissimo, Michael Ehrmann and Frank Smets, *Inflation persistence and price-setting behaviour in the euro area a summary of the IPN evidence*, ECB, Occasional Wpaper series no. 46, June 2006.
5. Source: Jeffrey C. Fuhrer, *Inflation persistence,* Working Papers, No. 09-14, 2009, Federal Reserve Bank of Boston.
6. Wage adjustments tend to be staggered because contracts at the company or sector level are renegotiated at different moments in time. Staggered price adjustment can occur because companies are reluctant to increase prices due to long-term relationships with customers or because they are concerned that their competitors will not follow. Contracts may also be expensive to renegotiate (source: see footnote 4).
7. "*Intrinsic inflation persistence refers to inflation that occurs purely as a result of past pricing decisions and cannot be explained by current and expected future fundamentals such as unit labour costs, output gaps, monetary policy, or cost-push shocks*." Source: Kevin D. Sheedy, *Intrinsic Inflation Persistence*, CEP Discussion Paper No 837, November 2007.
8. George J. Bratsiotis, Jakob Madsen, Christopher Martin, *Inflation Targeting and Inflation*

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What does this concretely mean in the current environment of exceptionally high inflation? Researchers at the Federal Reserve have analysed how much of recent US inflation is persistent and how much is broad-based. They found "t*hat the large ups and downs in inflation over the course of 2020 were largely the result of transitory shocks, often sector-specific. In contrast, sometime in the fall of 2021, inflation dynamics became dominated by the trend component, which is persistent and largely common across sectors.*[9]" For monetary policy, widespread inflation is important because it raises the likelihood of further price increases –companies may be more inclined to raise prices when most others are doing the same- but persistence is even more important. Persistently high inflation could weaken the credibility of the central bank and cause an un-anchoring of long-term inflation expectations. To pre-empt such a development, monetary authorities could decide to tighten policy aggressively. This helps to understand the increasingly hawkish rhetoric of Federal Reserve officials in recent months and their insistence on the need to frontload monetary tightening by moving to 50 basis rate hikes, rather than the usual 25 basis points increases. Fed Chairman Powell last week also hinted in that sense[10]. As far as the ECB is concerned, the policy approach should be more gradual but it is keeping a close eye on the risk of inflation becoming persistent. "*Two-thirds of the inflation we are suffering now is due to energy prices, so it's imported inflation. Monetary policy can do very little to deal with this kind of inflation. The main risk is that this type of inflation starts to be more and more persistent and gives rise to second-round effects. We need to monitor this very, very closely*.[11]" Reading between the lines, this means that, depending on the data, the first rate hike could come sooner after all, even as early as July.

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EURO AREA INFLATION: PERCENTAGE OF ITEMS* WITH ANNUAL CHANGE OVER 2%

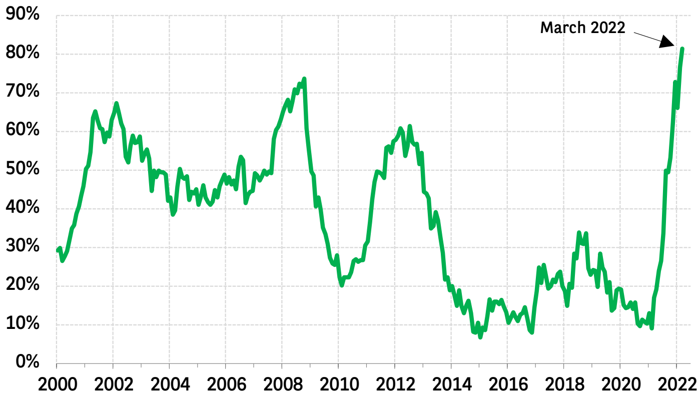

CHART 2

* SAMPLE OF 475 ITEMS SOURCE: EUROSTAT, BNP PARIBAS

Persistence, Economic and Political Studies, Vol. 3, No. 1, January 2015.
9. Martín Almuzara and Argia Sbordone, *Inflation Persistence: How Much Is There and Where Is It Coming From?* Liberty Street Economics, 20 April 2022. The authors use a quantitative model that decomposes each sector's inflation as the sum of a common trend, a sector-specific trend, a common transitory shock, and a sector-specific transitory shock.
10.Jay Powell signals Fed is prepared to raise rates by a half-point in May, Financial Times, 21 April 2022.
11.Source: ECB, Luis de Guindos, Vice-President of the ECB, interview with Bloomberg on 20 April 2022.