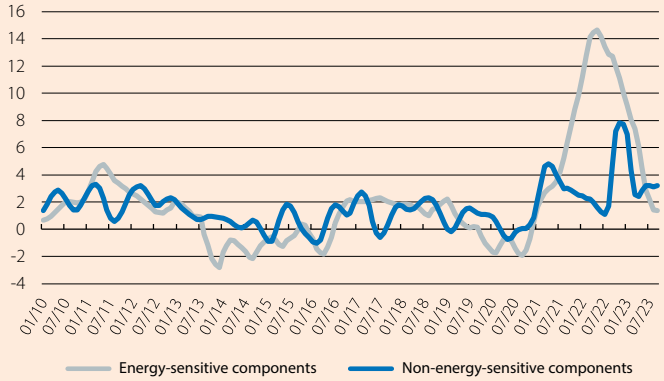
Inflation and monetary policy outlook for 2024

As we approach the end of 2023, interest rates are at their highest levels in 15 years. This follows the peaks in inflation reached in 2022, which forced the central banks to tighten monetary policy, cool down economic activity and ensure price stability in the medium term. Although it is still far from the 2% target rate, inflation in both the euro area and the US has fallen steadily throughout 2023, and one of the key assumptions in our 2024 outlook is that it will continue to do so next year, facilitating the first interest rate cuts by the Fed and the ECB. But how robust is this disinflationary assumption? How much of a hurry are the central banks in to lower rates?

To answer these questions, we begin with a diagnosis of inflation in three phases, starting with the initial impacts on prices (such as the bottlenecks associated with the pandemic or the energy crisis due to the war in Ukraine), continuing with the resulting indirect effects (the increase in the price of goods and services which, although not directly impacted by the initial shock, have been driven up by production costs and relative price adjustment) and ending with the second-round effects due to the feedback loop between prices, business margins and wages, which tends to give inflation greater inertia. Throughout this diagnosis, our indicator of reference will be momentum, a metric which captures the current state of inflation better than year-on-year rates.[1]

Euro area: momentum of HICP components according to their sensitivity to energy prices

(%)

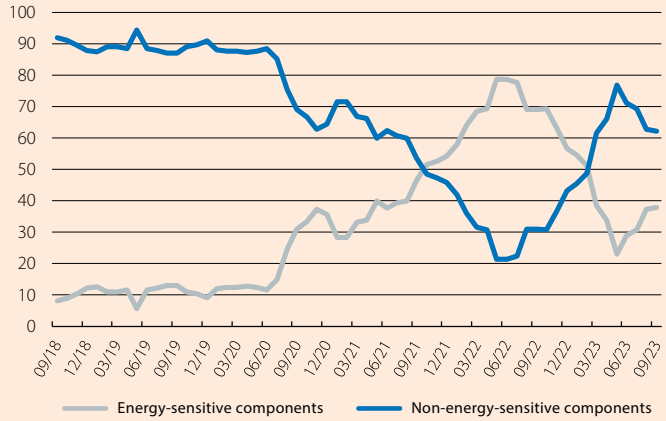


Notes: *Momentum is defined as the annualised change in the three-month average price index relative to the previous three months (with seasonally adjusted data). The chart shows a smoothed version. We identify the energy sensitivity of each sub-component of the headline HICP based on their statistical correlation with the energy HICP (details in footnote 2).*
Source: *CaixaBank Research, based on data from Eurostat.*

In the euro area, the main trigger for inflation was the tightening of energy prices due to the war in Ukraine. To assess the extent to which energy prices have filtered through to other prices and/or continue to determine inflation as a whole, we have analysed which components of the CPI are sensitive to energy prices and what price dynamics they follow.[2] As the first two charts show, the energy crisis spread to a large part of the price basket, to the point that the «energy-sensitive» components came to account for almost 80% of the CPI and were largely responsible for the inflation rally. However, by the autumn of 2023 the situation had normalised, albeit with a small but: whereas before the pandemic the momentum of non-energy-sensitive components fluctuated around the 2% mark, after the energy shock the momentum of these components has increased a notch and now lies closer to 3% than to the 2% rate to which the ECB aims.[3]

Euro area: relative weight of headline HICP components according to their sensitivity to energy prices

(%)



Note: *We identify the energy sensitivity of each sub-component of the headline HICP based on their statistical correlation with the energy HICP (details in footnote 2).*
Source: *CaixaBank Research, based on data from Eurostat.*

This first exercise indicates that the direct and indirect impact of the energy shock is close to fading, but it also suggests that we should remain cautious given the risk that some prices may have acquired greater inertia. In order to

1. Momentum is the change in the three-month average CPI compared to the previous three months (annualised and seasonally adjusted). It strikes a good balance between being a low volatility metric (like year-on-year rates of change) while also providing real-time information (like month-on-month rates).
2. With the breakdown of the HICP basket into 94 sub-components, we estimated the relationship between the momentum of each sub-component ($\pi_t^{i,m}$) with the momentum of energy ($\pi_{t-k}^{ener,m}$):

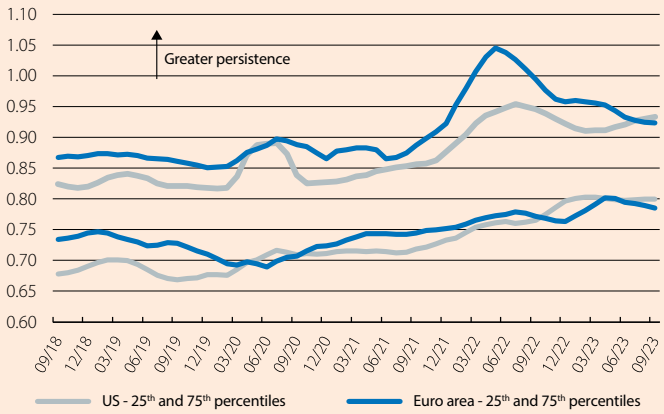
$$\pi_t^{i,m} = \alpha + \beta \pi_{t-k}^{ener,m} + \varepsilon_t$$

We analysed four cases (ranging from $k = 0$ to $k = 3$) in 24-month rolling windows. We consider a component «energy sensitive» if it has a positive β that is statistically significant in at least one of the energy momentum lags.
3. The same exercise for the US shows that the importance of the components that are sensitive and non-sensitive to energy prices is much more stable over time and, in fact, their inflation rates follow similar dynamics. This reflects the differing nature of the inflation rally in the US, where it has been more influenced by imbalances in domestic supply and demand than by the energy crisis.

analyse this risk, we examined the degree of persistence of inflation in a second year.[4] As can be seen in the third chart, this analysis shows that the inertial component of inflation has broadly increased over the past two years. However, this increase is relatively moderate and there is a decrease in the momentum shared among the components, regardless of their degree of persistence. In fact, in the US, where this persistence could be of greater concern due to the nature of the country's inflation, the more inertial components have recently shown less momentum than the rest and, excluding rents (shelter, which accounts for a high proportion of the index but follows but idiosyncratic dynamics),[5] they explain only a small portion of aggregate inflation.

Inflation persistence

Index

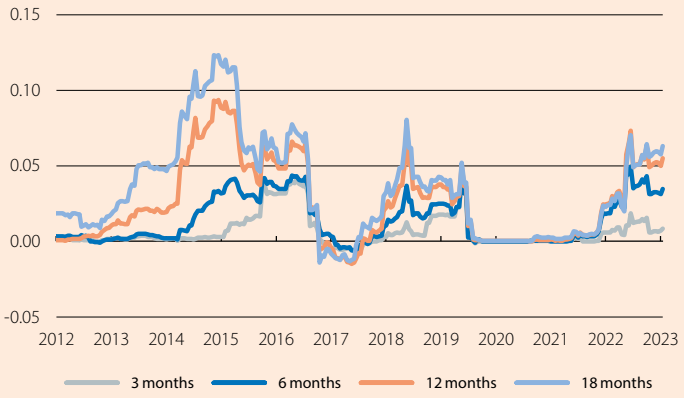


Notes: *We estimate an AR(1) for the momentum of each sub-component of the headline CPI using 24-month rolling windows and we obtain the distribution of autoregressive coefficients of all sub-components. The chart shows the evolution over time of the coefficients corresponding to the 25th and 75th percentiles of these distributions (smoothed time series).*
Source: *CaixaBank Research, based on data from the Bureau of Labor Statistics and Eurostat.*

Thus, as we are now in this third and final phase of the inflationary crisis, the central banks consider it is no longer necessary to raise interest rates any further. As the members of the ECB and the Fed have stated in their recent appearances, keeping interest rates «high for longer» could be sufficient to finish this last mile and reach the 2% target. In this regard, one exercise that can illustrate how the financial markets are internalising this strategy is the greater sensitivity to economic surprises that the longer maturities of the various yield curves are showing compared to the shorter sections.[6]

*Sensitivity of expectations on Fed interest rates to economic surprises **

Coefficient



Note: ** We show the evolution of the coefficient β of the regression set out in footnote 6 for each of the various maturities (3, 6, 12 and 18 months) for the 20-month rolling window.*
Source: *CaixaBank Research, based on data from Bloomberg.*

As the last chart shows, the sensitivity of futures on the Federal Reserve interest rate to surprises in the publication of economic data is greater for longer-term maturities (18 months) than it is for shorter-term maturities. This dynamic has existed from 2012 through to the present day; that is, the same economic surprise causes a greater rebound in long-term maturities than in short-term ones, given that with a longer time horizon there are more opportunities for the Fed to raise interest rates at its regular meetings. Nevertheless, what we can see in recent months is how the sensitivity of 18-month futures continues to increase moderately, while that of 3 and 6-month futures is decreasing. This suggests that the markets are no longer so focused on how much more the Fed will raise interest rates by, but rather on how long it will keep them high for.

However, we believe that in 2024 we are likely to see the first interest rate cuts, albeit moderate ones in the absence of a sharp slowdown in economic activity. Above all, we expect they will not be of sufficient magnitude for us to declare that the restrictive monetary policy environment has been abandoned.

4. Using CPI breakdowns (82 sub-components in the US and 94 components in the euro area), we estimated the auto-regressive behaviour of the momentum of each sub-component in 24-month rolling windows:

$$\pi_t^{i,m} = c + \rho \pi_{t-1}^{i,m} + \varepsilon_t$$

In each window, we sorted the estimated values of ρ from lowest to highest and we classified the subcomponents into three categories based on their persistence: low (ρ among the lowest 25% of values), moderate (between 25% and 75%) and high (ρ among the highest 25% of values).

5. See the Focus «The importance of rents in US inflation» in the MR09/2023.

6. We estimate the following regression using a rolling window with 20 observations,

$$\Delta i_t^n = \beta^n s_t + cpi_t + \varepsilon_t$$

Δi denotes the daily change in futures on the Fed's interest rate for maturities of n months (3, 6, 12 and 18); s denotes the difference between the figure published and that expected by the Bloomberg consensus for the CPI and job creation in the US; cpi is a variable which takes a value of 1 if the date corresponds to the publication of inflation data and 0 if it is employment; and ε_t is an error term. In the fourth chart we show the evolution of the four coefficients β^n.