

## WHAT DRIVES THE PACE OF DISINFLATION?

There is a large consensus that 2023 should be a year of disinflation. Monetary tightening will play an important role in that respect. However, it is difficult if not impossible to estimate when and at which level of official interest rates, inflation will have sufficiently converged to target. This explains why the Federal Reserve and the ECB have decided to frontload their rate hikes. It should reduce the risk of inflation surprising to the upside. A lot will depend on how inflation expectations evolve. Recent research shows that firms use price information to which they are directly exposed to form an opinion of future, aggregate inflation. This implies that disinflation could be a slow process considering that a majority of firms in the euro area are confronted with rising input prices.

There is a large consensus that, absent new negative supply shocks, next year should be a year of disinflation - a declining trend of inflation - on the back of favourable base effects, the easing of supply bottlenecks and slower demand growth due to the pressure of inflation on household income and corporate profits as well as rising interest rates. Professional forecasters project inflation at the end of 2023 to be significantly lower than at the start of the year (table 1). However, these forecasts are surrounded by a lot of uncertainty.

During the course of this year, the forecasts for next year's inflation had to be revised upwards several times, to a large extent due to new shocks, such as the war in Ukraine, and their impact on commodity and in particular energy prices. The fact that inflation became very broad-based also played a role. This year's experience implies that inflation forecasts for 2023 are surrounded by an unusually high degree of uncertainty. This point is illustrated by the distribution of inflation forecasts for the fourth quarter of next year. Compared with the distribution for the fourth quarter of this year, there is a shift to the left -forecasters expect lower inflation- but there is nevertheless a high degree of disagreement amongst the forecasters (chart 1 and 2). The Federal Reserve and the ECB also face this uncertainty in their own projections, which explains why they have switched to a data-dependent policy.

It is indeed difficult if not impossible to estimate with a sufficient degree of confidence when and at which level of official interest rates, inflation will have sufficiently converged to target. The former question concerns the speed of disinflation, the latter how much cumulative tightening will be necessary to slow down demand growth to cool inflation pressures.

Disinflation can occur with an unchanged monetary policy. At the risk of oversimplifying, imbalances between demand and supply narrow because demand slows down due to high inflation and supply increases because companies see attractive opportunities due to higher output prices. We can call this process endogenous disinflation. However, such a process would take a lot of time.

Disinflation can also occur when an inflation-targeting central bank reacts to elevated inflation by tightening its monetary policy. For the spending and production decisions of households and businesses,

this represents an exogenous shock, so we can call this exogenous disinflation<sup>1</sup>. Both types of disinflation are intertwined. Rate hikes reinforce the endogenous dynamics, but the pace of the latter will influence the extent of monetary tightening. Indeed, if it is too slow, it would raise concern that households and companies would expect inflation to stay well above the central bank's target, i.e. inflation expectations would become unanchored. This could influence demands for wage increases and price setting decisions of firms.

This explains why the Federal Reserve and the ECB have decided to frontload their rate hikes. This way they demonstrate they're serious about bringing inflation down to target. It reduces the risk of being surprised to the upside in terms of inflation developments because a faster cumulative tightening will slow down demand more quickly compared to a more gradual approach.

1. A positive supply shock -e.g. a sudden, significant increase in the supply of commodities- is another example of exogenous disinflation.

### FREQUENCY DISTRIBUTION OF INFLATION FORECASTS FOR THE US

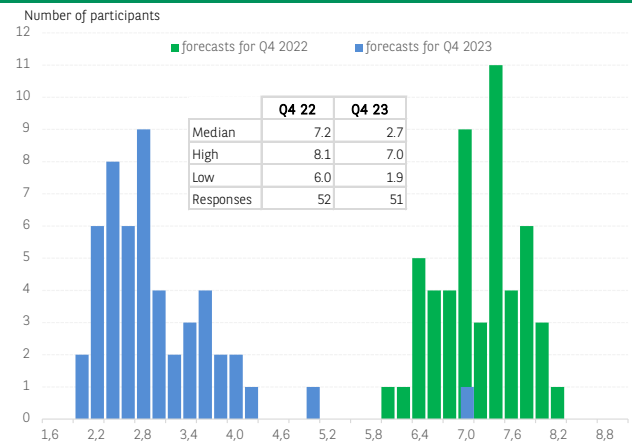


CHART 1

SOURCE: CONSENSUS BLOOMBERG, BNP PARIBAS

Recent research shows that firms use price information to which they are directly exposed to form an opinion of future, aggregate inflation. This implies that disinflation could be a slow process considering that a majority of firms in the euro area are confronted with rising input prices.



A second reason is that it should influence inflation expectations. A recent ECB survey concludes that *“the significant rise in inflation since 2020 appears to have influenced the role of expected inflation in expected selling prices, with 58% of firms now reporting it as “very important” (up from 30% in 2020).”*<sup>2</sup>

This raises the question whether firms’ inflation expectations are forward or backward looking. In case of the former, they would incorporate the expected negative impact of monetary tightening on the outlook for aggregate demand, pricing power, etc. In case of the latter, recent inflation developments play a key role in forming expectations about the future, so inflation first would need to drop before seeing a decline in expectations.

Recent research of the IMF sheds light on this question. Using a unique dataset on Chilean firms, the authors find *“that firms use changes in input prices observed in the transactions with their suppliers -i.e. supply chain inflation- to form expectations about aggregate -i.e., CPI- inflation”*<sup>3</sup>. Firms use price information to which they are directly exposed -i.e. local information- to form an opinion of future, aggregate inflation. Similar results were obtained in earlier research on French companies<sup>4</sup>. This could mean that disinflation could be a slow process considering that a majority of euro area manufacturing companies are still confronted with rising input prices<sup>5</sup>.

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2. Source: *Selling price expectations among euro area enterprises*, ECB Economic Bulletin, Issue 5/2022  
 3. Source : *Inflation Expectations and the Supply Chain*, IMF, working paper 22/161, July 2022.  
 4. Source: *No Firm Is an Island? How Industry Conditions Shape Firms’ Expectations*, Philippe Andrade, Olivier Coibion, Erwan Gautier and Yuriy Gorodnichenko, Banque de France working paper 780, September 2020.  
 5. The manufacturing input price purchasing managers’ index for the euro area in August stood at 71.7 (source : S&P Global PMI).

**CHART 2: FREQUENCY DISTRIBUTION OF INFLATION FORECASTS FOR THE EURO AREA**

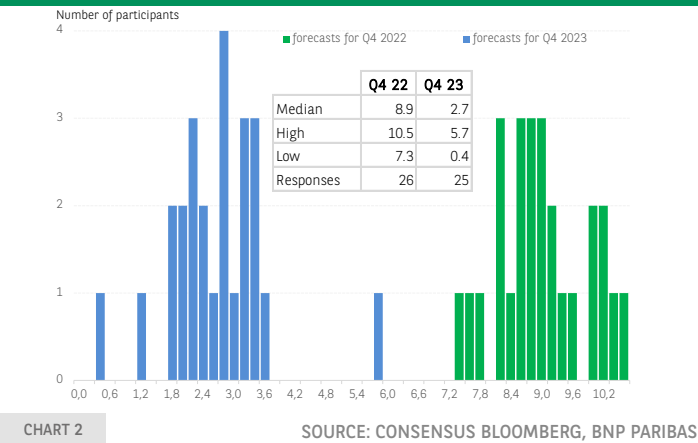


CHART 2

SOURCE: CONSENSUS BLOOMBERG, BNP PARIBAS

**CONSENSUS FORECASTS OF INFLATION**

		Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23
US	CPI (YoY%)	8.7	8.2	7.2	5.8	3.9	3.1	2.7
US	Core PCE (yoy%)	4.8	4.6	4.3	3.7	3.3	3	2.7
Eurozone	CPI (YoY%)	8	9.1	8.9	6.9	5.1	3.8	2.7

TABLE 1

SOURCE: BLOOMBERG, 12 SEPTEMBER 2022

