

## Three scenarios for inflation and central banks

Inflation is uncomfortably high and in the near term, there's unlikely to be much respite for central banks. But the outlook for 2023 and 2024 is shrouded in uncertainty, and inflation will hinge not just on energy prices but on short-term factors like supply chain disruption, as well as the longer-term forces of deglobalisation and demographics



Source: Shutterstock

Inflation remains one of the hottest economic topics of the moment, affecting households and companies and giving central bankers a very hard time. For a long time, central bankers had labelled accelerating inflation as 'transitory', attributing the rise to the reopening effects after Covid lockdowns. With inflation surging for the second year in a row, inflation could still be labelled as 'transitory' in the sense that it is mainly driven by global factors like the reopening of economies, supply chain frictions, and the war in Ukraine and its impact on energy and commodity prices. However, it is definitely not 'transitory' in the sense of being temporary. In the Western world, in particular, high inflation has become an enormous concern. Headline inflation

rates like those seen in the 1970s will most likely be transitory, higher prices won't.

Most central banks and many private sector forecasters have had their respective inflation forecasts wrong for a long time. The main reason for these forecasting errors has been energy and commodity prices, which have surged over the last year. However, forecasting errors were also related to the underestimation of pass-through effects, ie, the willingness and ability of companies to actually charge higher prices.

In the past, companies often had to squeeze their profit margins in order to maintain market share when faced with higher costs. Strong demand from consumers, higher savings, and relatively stable income developments, however, have given companies huge pricing power. Additionally, the astonishing surge in American home prices and the rapid feed-through into rents, which carry a one-third weighting in the US CPI basket, has provided additional upside impetus. Looking ahead, the shorter-term path for inflation will be highly dependent on energy and commodity price developments, pass-through effects, and wage developments.

Over the longer term, however, other factors will be more important in shaping the inflation outlook. Just think of the peak in globalisation (ie, less global trade, less downward pressure on global goods prices, reshoring or friendshoring), demographics and decarbonisation. We think that all these structural factors will push up inflation globally to higher levels than in the past decade. Higher wage growth in the near term will also add to inflation momentum.

While it is always tough to make predictions, we have developed three scenarios for inflation developments in the coming two years.

## 1 Our base case

In our base case, we're assuming that energy prices stay supported through 2022 but begin to ease through 2023, perhaps linked to a gradual de-escalation in the Russia-Ukraine war. As our chart below shows in year-on-year terms, energy prices will begin to exert a negative base effect on headline inflation from late this year.

Still, there are plenty of pipeline pressures and pass-through effects should keep core inflation elevated through the remainder of this year. Worker shortages in the US mean there are now almost two vacancies for every unemployed worker, and the resulting wage pressure will mean services inflation remains sticky. Rising house prices have also lifted US core inflation, but Federal Reserve rate hikes should begin to cool the housing market and demand for consumer loans. Weaker house price inflation (and even outright price falls) will begin to pull the rental components within CPI sharply downwards through 2023.

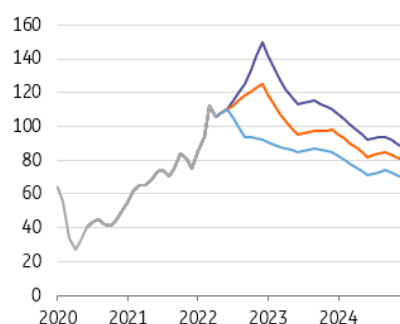
Meanwhile, improving supply chains should bring down new car prices in 2023 and 2024, and there are already signs that used car prices have topped out. Reduced consumer demand for goods, now services have reopened, will also help alleviate one source of last year's supply pressure. That, combined with weaker private consumption in the eurozone given higher energy/commodity prices, will reduce companies' ability to pass on higher costs. Demands for higher wages in Europe will only be partially met, keeping wage growth between 2% and 3% year-on-year.

The Fed takes rates slightly beyond neutral, but the European Central Bank proceeds more cautiously. In both cases, the normalisation process should end around the turn of the year and keep central banks in a 'wait-and-see' mode throughout most of 2023.

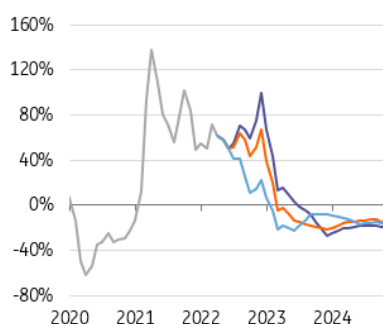
## Three energy price scenarios and their resulting base effects

**Brent crude:** Three scenarios — High inflation scenario — Base case — Low inflation scenario

Brent crude (USD)

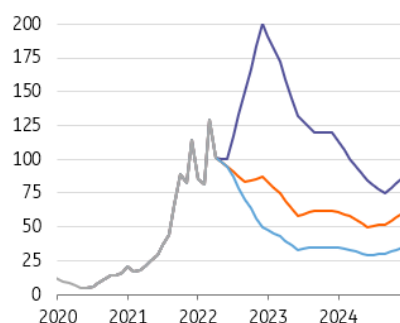


Year-on-year change (%) - Base effects

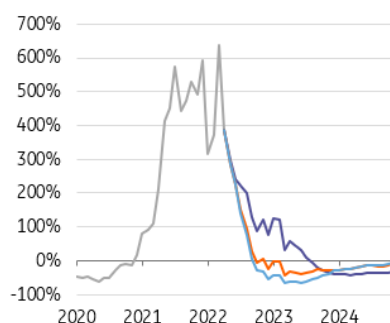


**European natural gas:** Three scenarios

Dutch TTF natural gas (month ahead EUR)



Year-on-year change (%) - Base effects



Source: Macrobond, ING

## 2 High inflation scenario

There are several factors that could keep inflation higher for longer, and in this scenario we're assuming:

- The Russia-Ukraine war drags on for years, and Europe has to make the transition completely away from Russian energy and commodities. Oil prices end the year at \$150/bbl if secondary sanctions are introduced on Russian crude. Gas prices for next winter go much higher if flows from Russia into Europe are significantly disrupted. But assuming energy prices don't continue to ratchet higher in subsequent years, at least not at the same pace, then we're still likely to get negative inflation base effects from oil/gas, albeit later than in our base case.
- China's zero-Covid strategy continues for the foreseeable future, putting more pressure on supply chains, while the West is increasingly worried about a China-Russia axis. Consequently, Western economies try to re-shore more production to "home" markets.
- Labour market rigidities become more structural and with hostility to immigration, supply problems persist and workers develop an appetite for wage increases with more unionisation.
- Fiscal policy remains highly supportive, offsetting the impact of higher prices on disposable incomes.

Central banks, especially the Fed, will hike more aggressively this year but inflation fails to come down even with a bit of a slowdown/recession in 2023 (albeit one which doesn't generate a

pronounced increase in unemployment). That results in even more aggressive rate hikes, in a not-so-subtle attempt to bring about a sharp downturn – essentially a modern-day Volcker moment. Inflation is eventually lower, though not before 2024.

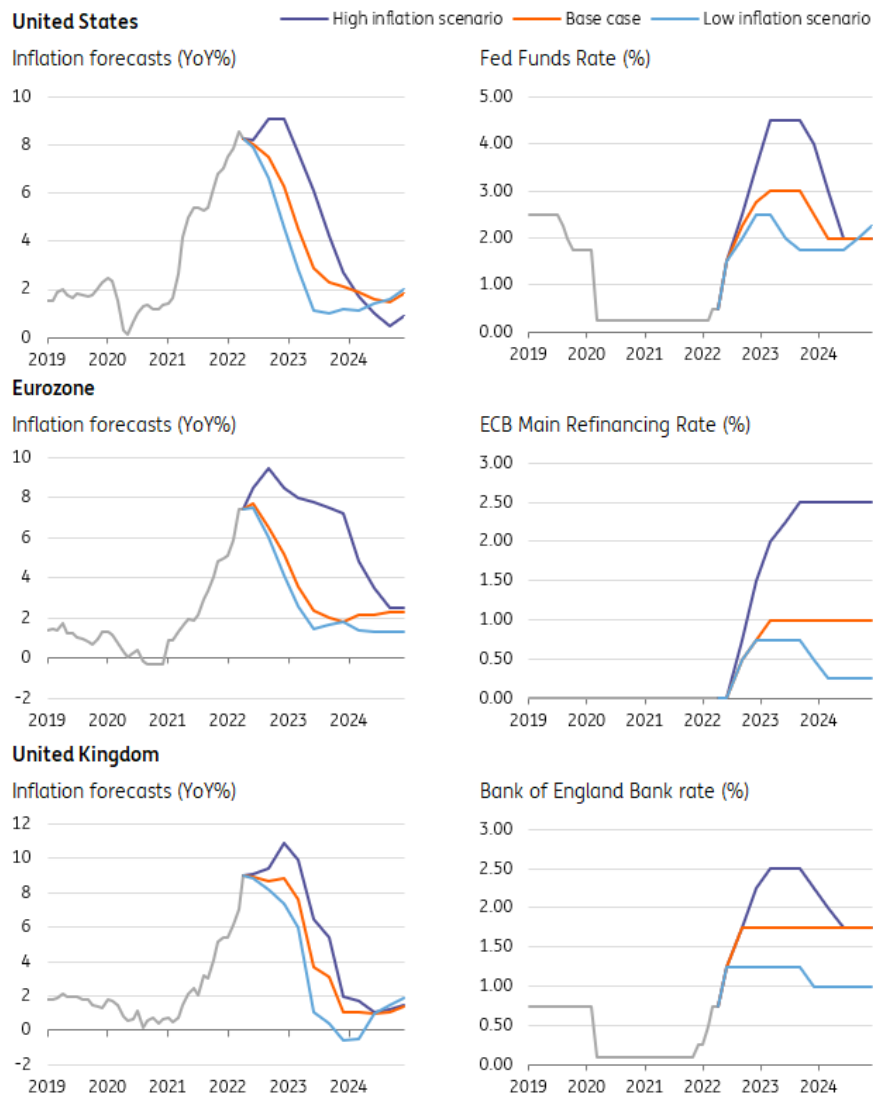
### 3 Low inflation scenario

Here, a significant de-escalation in the war facilitates a reopening between Russia and the West. Energy and commodity prices drop significantly. China loosens its zero-Covid strategy more quickly than expected, while also adopting Western vaccines to help insulate against future waves of infection. Supply chain frictions ease, particularly when combined with a swift reduction in durable goods demand as consumers rebalance towards services. Goods that saw swift price rises through 2021 see outright price falls, with some retailers grappling with excess inventory as delayed shipments arrive.

Meanwhile, the shortage of skilled workers is solved by increasing the participation rate in labour markets, which could reduce wage pressures. Central banks have overreacted in their policy normalisation, pushing many economies to the brink of recession by the turn of the year and fiscal policy turns restrictive again.

In this scenario, central banks implement the same normalisation as in the base case scenario, stopping rate hikes somewhat earlier and actually starting to cut rates again in the second half of 2023.

## Three scenarios for inflation and policy rates



Source: Macrobond, ING

## Longer-term inflation outlook

Over the last few decades, central bank credibility, new inflation targets and several global factors had brought inflation structurally down. In particular, globalisation and digitalisation were two enormous drivers of deflation or disinflation. Just looking at these structural trends, we think that the coming years will bring more upward pressure on prices. This is what we call 3D inflation, ie, inflation structurally driven by decarbonisation, deglobalisation and demographics.

**Decarbonisation:** The war in Ukraine will speed up the green transition in Europe and this decarbonisation is likely to be inflationary, at least in the initial stages. Investment in renewable energies will first bring additional demand for fossil fuels and commodities. The transition toward renewable energies is likely to push up prices initially before renewables and energy autonomy leads to much lower prices.

Also, as we try to move towards net-zero we are likely to see European governments incentivise action by raising and implementing carbon taxes, which could limit the scope for significant falls in energy prices. This is less likely to be a route in the US with the prospect of Republicans regaining control of Congress. At the same time, the move to renewables will significantly boost demand for

key industrial and rare earth metals used to generate renewable energy and for battery storage, adding to costs and inflation pressures. Consequently, this is likely to argue for higher inflation in the near term, especially in Europe. The hope is this will mean greater energy security, at least in the shorter term, and fewer fluctuations in global energy prices, which should help to depress inflation pressures.

**Deglobalisation:** Businesses may look to re-shore activity as a combination of the pandemic and Russia's invasion of Ukraine has highlighted major issues over the durability of supply chains. The purpose of offshoring was to reduce labour costs and allow economies of scale to drive down input costs. Ensuring security and stability of supplies over and above keeping costs low will mean price levels and inflation are likely to be higher and consequently lead to higher wages.

**Demographics:** This can affect inflation trends in a number of ways. Fast-growing populations mean the demand for food, housing, entertainment, and so on, is going to be growing more quickly, which could generate higher inflation. However, the composition of the population growth is also important. If it is via high childbirth rates this means more mouths to feed, but there won't be an immediate positive impact on the supply capacity of the economy versus, say if population growth was primarily due to immigrant workers in their twenties and thirties.

Another way demographics impact inflation is that as people move through middle age and head toward retirement they tend to earn and spend less. One conclusion is that countries with faster-growing, younger populations are going to see more economic demand and greater inflation pressures than countries with slower population growth and rapid ageing of the population.

Data shows that the US has a younger population than Europe with a median age of 38.4 years versus 47.8 in Germany, 41.7 in France and 40.6 in the UK. In fact, Ireland is the only European country with a lower median age (37.8 years). At the same time, the US is experiencing more rapid population growth of 1% per year versus 0.1% in Germany, 0.2% in France and 0.6% in the UK. Ageing economies are increasingly experiencing labour shortages, which in turn could lead to higher wages.

## Will structurally higher inflation lead to structurally higher interest rates?

Even if the current high headline inflation rates are not sustainable and will come down, the era of disinflation or deflation is clearly over. In the coming year, central banks will be facing structurally higher inflation rates than over the last two decades. The question will then be whether Western central banks will try to fight this structurally higher inflation with the same determination that they fought disinflation, knowing that their success could be as disappointing as over the last two decades. This time around, the impact on the real economy from tightening monetary policy too much could be much more adverse than it was in the fight against disinflation.

## Our three inflation scenarios in full

Scenario 1: Base case														
	2022				2023				2024					
Energy prices	Q2	Q3	Q4	FY22	Q1	Q2	Q3	Q4	FY23	Q1	Q2	Q3	Q4	FY24
Brent crude (USD)	110	118	125	113	107	95	97	98	99	90	82	85	80	84
Dutch TTF natural gas (EUR)	95	83	87	91	75	58	62	62	64	58	50	52	60	55
Inflation (YoY%)														
United States	8.0	7.5	6.3	7.4	4.5	2.9	2.3	2.1	3.0	1.9	1.6	1.5	1.8	1.7
Eurozone	7.7	6.5	5.2	6.4	3.6	2.4	2.0	1.8	2.5	2.2	2.2	2.3	2.3	2.2
United Kingdom	8.9	8.7	8.8	8.2	7.6	3.7	3.1	1.1	3.9	1.1	1.0	1.1	1.4	1.2
Policy rates (%)														
United States	1.50	2.25	2.75		3.00	3.00	3.00	2.50		2.00	2.00	2.00	2.00	
Eurozone (refi rate)	0.00	0.50	0.75		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
United Kingdom	1.25	1.75	1.75		1.75	1.75	1.75	1.75		1.75	1.75	1.75	1.75	
Scenario 2: High inflation														
	2022				2023				2024					
Energy prices	Q2	Q3	Q4	FY22	Q1	Q2	Q3	Q4	FY23	Q1	Q2	Q3	Q4	FY24
Brent crude (USD)	110	125	150	121	127	113	115	110	116	101	92	94	88	94
Dutch TTF natural gas (EUR)	100	150	200	138	172	132	120	120	136	100	84	75	86	86
Inflation (YoY%)														
United States	8.2	9.1	9.1	8.6	7.7	6.1	4.2	2.7	5.2	1.7	1.0	0.5	0.9	1.0
Eurozone	8.5	9.5	8.5	8.8	8.0	7.8	7.5	7.2	7.6	4.8	3.5	2.5	2.5	3.3
United Kingdom	9.1	9.4	10.9	8.9	9.9	6.5	5.4	2.0	6.0	1.7	1.1	1.2	1.5	1.4
Policy rates (%)														
United States	1.50	2.50	3.50		4.50	4.50	4.50	4.00		3.00	2.00	2.00	2.00	
Eurozone (refi rate)	0.00	0.75	1.50		2.00	2.25	2.50	2.50		2.50	2.50	2.50	2.50	
United Kingdom	1.25	1.75	2.25		2.50	2.50	2.50	2.25		2.00	1.75	1.75	1.75	
Scenario 3: Low inflation														
	2022				2023				2024					
Energy prices	Q2	Q3	Q4	FY22	Q1	Q2	Q3	Q4	FY23	Q1	Q2	Q3	Q4	FY24
Brent crude (USD)	110	94	92	99	88	85	87	85	86	78	71	74	70	73
Dutch TTF natural gas (EUR)	95	70	50	79	43	33	35	35	37	33	29	30	35	32
Inflation (YoY%)														
United States	7.9	6.6	4.6	6.8	2.8	1.1	1.0	1.2	1.5	1.1	1.4	1.6	2.0	1.5
Eurozone	7.5	6.0	4.1	6.0	2.6	1.5	1.7	1.8	1.9	1.4	1.3	1.3	1.3	1.3
United Kingdom	8.8	8.2	7.4	7.7	6.0	1.1	0.4	-0.6	1.7	-0.5	1.0	1.5	1.9	1.0
Policy rates (%)														
United States	1.50	2.00	2.50		2.50	2.00	1.75	1.75		1.75	1.75	2.00	2.25	
Eurozone (refi rate)	0.00	0.50	0.75		0.75	0.75	0.75	0.50		0.25	0.25	0.25	0.25	
United Kingdom	1.25	1.25	1.25		1.25	1.25	1.25	1.00		1.00	1.00	1.00	1.00	

Source: ING

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