

Economic Research

Economic Briefing

Update inflation model - energy prices on the rise

Our quant model based on machine learning is forecasting higher inflation in the euro area in the coming months than a month ago. The main reason for this is the sharp rise in energy prices at the turn of the year. The core rate, on the other hand, is likely to be somewhat weaker. We also expect price-driving effects beyond the quant model due to special effects at the beginning of the year.

Inflation should fall in the first half of the year

Our updated Quant-model for inflation in the euro area based on machine learning (see **here**) continues to expect the ECB target to be reached in the summer. A slight upward revision of the Quant-model compared to the update in December does little to change this (Chart 1). Above all, higher commodity prices at the turn of the year will lead to an inflation rate that is up to 0.1 percentage points higher than previously expected.

For our main forecast, we have added further assumptions to the purely data-driven Quant-model. This is because insurance premiums, for example, rise significantly at the beginning of the year, which the Quant-model does not fully include in its calculations. Including additional assumptions, we expect an inflation of 2.5% for January 2025. Over the course of the year, inflation is likely to come close to the ECB's target of 2%, but not fall below it according to our forecast.

21 January 2025

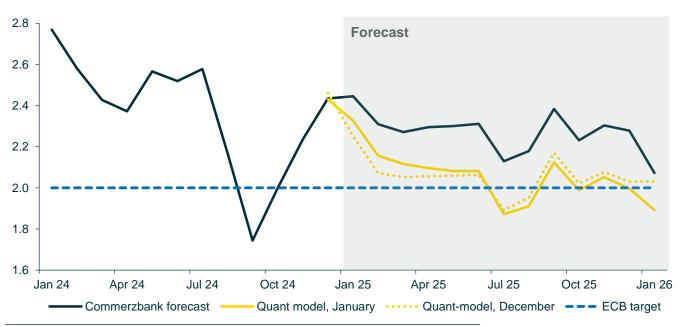
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Chart 1 - We expect a somewhat higher inflation than the Quant-model

Consumer price index in the euro area, year-on-year rate in %, beginning January 2025 Commerzbank forecasts



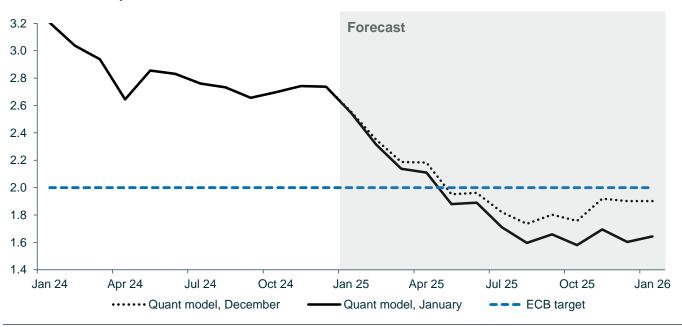
Source: Eurostat, Commerzbank forecasts

A weak economy puts pressure on core inflation

The Quant-model for inflation excluding the volatile prices for energy, food, alcohol and tobacco (core rate) expects an even sharper fall in the previous year's rate than previously forecast. The weak economy in particular is having an increasingly dampening effect on the prices of goods and services. The Quant-model therefore calculates core inflation to be around 0.1 percentage points lower this year than in December (Chart 2). The sharp fall in core inflation is also due to strong base effects. However, the pure Quant-model does not take into account one-off effects at the start of the year such as rising insurance premiums.

Chart 2 - The Quant-model still expects the core rate to fall

Consumer price index in the euro area excluding energy, food, beverages and tobacco, year-on-year rate in %, Commerzbank quant-forecasts as of January 2025



Source: Eurostat, Commerzbank Research

Deep dive: Energy prices rise at the turn of the year

After the peak of the energy crisis in 2022, falling energy prices have generally lowered inflation in subsequent years. In recent weeks, however, the prices of Brent crude oil and natural gas on the European market have risen sharply. A weighted average price of crude oil, natural gas and coal from 1 to 20 January 2025 was on average around 5% higher than in December (Chart 3).

Chart 3 - The prices for energy future contracts have risen

Weighted price index for energy future contracts for fossile fuels, January 2024 = 100.



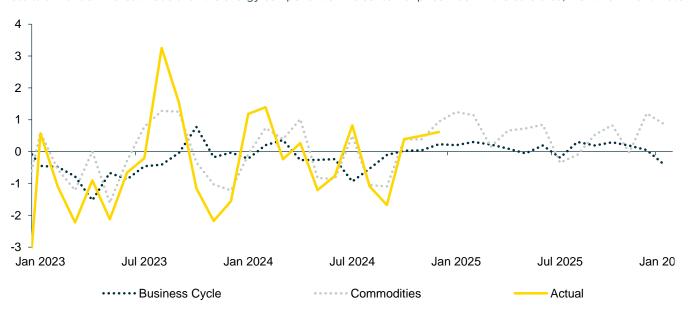
Source: Bloomberg, Commerzbank-Research

These future contracts prices are also likely to be reflected in consumer prices in the euro area at the beginning of the year. To quantify this, we use a random forest model (the basis of our Quant-model) to calculate what the higher commodity prices mean

for energy price inflation in a month-on-month comparison (Chart 4). As the grey dotted line shows, the month-on-month rate of energy prices could be above the 1% mark in the coming months due to commodity prices. Only the weak economy, as measured by sentiment indicators such as the Purchasing Managers' Index, for example, suggests an extremely moderate price trend (black dotted line). Due to the higher forecast quality of commodities, we expect energy prices for consumers to rise significantly in January.

Chart 4 - Fuel prices lead to higher inflation

Results of Random Forest Models for the energy component of the consumer price index in the euro area; month-on-month rate in %



Source: Commerzbank-Research

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