

Economic Research

Economic Briefing

Update inflation Quantmodel – services prices rise more slowly

In this month's forecast update, our machine learning-based Quant-model expects higher inflation in the euro area than a month ago. In particular, food prices are likely to rise somewhat more than previously thought. In contrast, inflation for services should ease significantly next spring.

The Quant-model indicates slightly higher inflation in the euro area

Our machine learning-based quant model (see documentation **here**) expects slightly higher inflation rates in the coming months than it did last month. Calculations with data available until mid-November show this. Between December of this year and April of next year, the model now forecasts a 0.1 percentage point higher inflation (Chart 1). One reason for the higher year-on-year rates is that the model reacts to the recent sharp rise in food and beverage prices. As far as the inflation trend is concerned, the model expects the December inflation rate to rise to 2.5%, mainly due to a base effect, after which inflation is forecast to fall below 2%.

26 November 2024

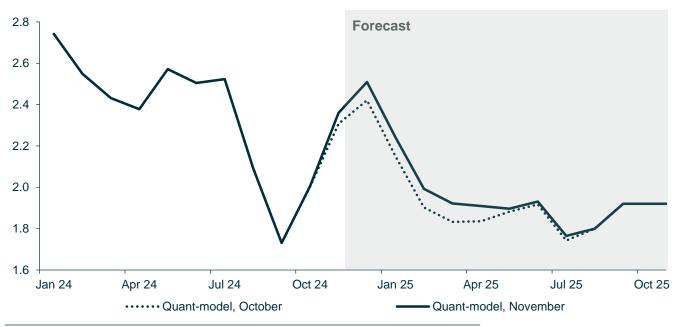
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Chart 1 - The inflation forecast rises slowly

Consumer price index in the euro area, year-on-year rates in %, as of November 2024 Commerzbank forecasts



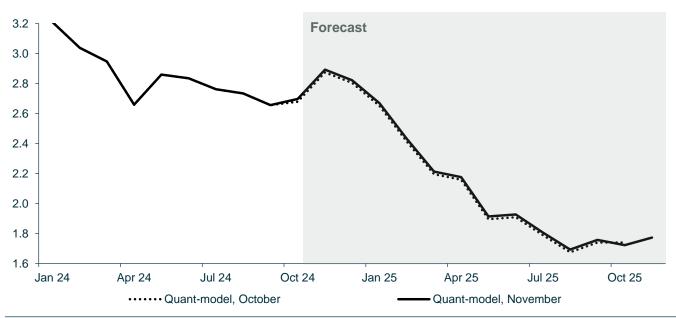
Source: Eurostat, Commerzbank-Research

The core rate could tumble down next year

The Quant-model's forecasts for inflation excluding the volatile prices of energy, food, and beverages (core rate) have not changed (Chart 2). As in the previous month, the model expects a temporary increase in core inflation to 2.9% in December, followed by a noticeable decline in the first half of next year. This forecast takes into account that strong price increases in the spring of 2024 will no longer be included in the year-on-year comparison and that the core rate will therefore fall in the spring of 2025 (base effect). However, we assume that the model could underestimate the core rate (see last paragraph below).

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

Consumer price index in the euro area excluding energy, food, beverages and tobacco, year-on-year rates in %, Commerzbank forecasts as of November 2024



Source: Eurostat, Commerzbank Research

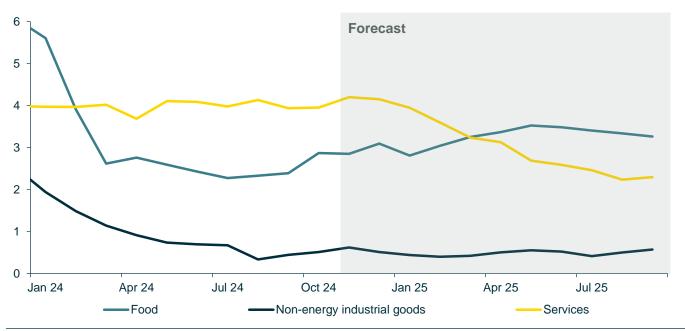
Food prices will become an inflation driver

In the course of the coming year, the year-on-year rate of services prices in particular should fall significantly. This is due to both base effects and the fact that wages are no longer rising quite as fast (see below). In addition, goods prices are likely to continue to rise at a low year-on-year rate of only around 0.6% (Chart 3). Falling producer prices (year-on-year) largely offset the effect of rising international freight rates. By contrast, the faster rise in food prices is pushing up inflation. The year-on-year rate for food prices is likely to rise from around 2.9% in October this year to up to 3.5% next year.



Chart 3 - Food price inflation accelerates

Consumer price index in the euro area, year-on-year rates in %, from November 2024 forecasts of the Quant-model



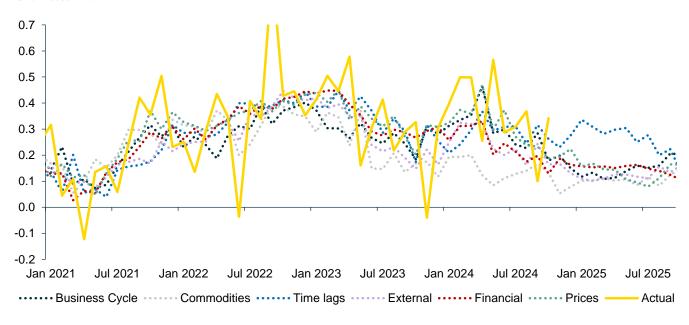
Source: Eurostat, Commerzbank-Research

Deep Dive: downside risk for services inflation

Our Quant-model has been forecasting for several months that services price inflation will fall noticeably in the coming months. Five out of six random forest models (the basis of our Quant-model), each of which processes indicators from different areas, show a clear downward trend for the coming months. This is partly due to the fact that wages are not expected to rise quite as sharply in the future as they have recently; the recent sharp increase in collectively agreed wages in the euro area (5.4% in the third quarter) is mainly due to one-off payments in Germany. In addition, the fall in oil prices is likely to dampen price increases for transport services. Only the random forest model based on time lags (including past services prices themselves) indicates a stable path for the previous month's rates for services of around 0.3%. This is likely due to both past sharp increases in services and the price jumps for food. The latter are also passed on, with a time lag, to the prices for services in the hospitality industry.

Chart 4 - Random Forest forecasts expect falling service prices

Consumer price index in the euro area, services, six Random Forest forecasts and actual inflation, seasonally adjusted month-on-month rates in %



Source: ECB, Commerzbank-Research

The Quant-model could underestimate inflation

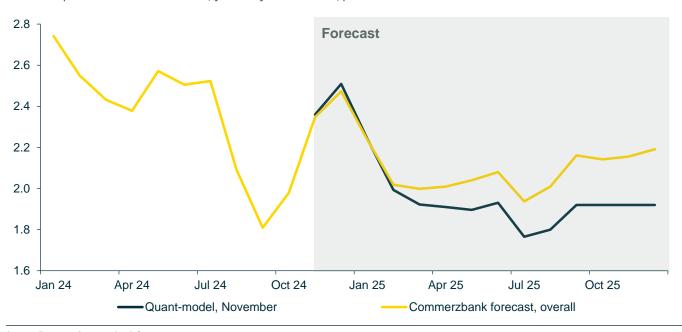
We always scrutinize the results of the purely data-driven model and supplement them with economic assumptions if necessary. At present, the model may somewhat underestimate the inflation risks:

First, insurance premiums could rise significantly again next January and February. Second, wages have risen very sharply as of late. In the past, there may not have been enough variation to train the random forest model to these jumps in wage costs and insurance premiums. Third, the CO2 price will rise again in January 2025. This will initially make energy more expensive and, in the further course of the year, increase indirectly the core rate. Currently, the CO2 price (or its forecast) is not yet integrated into the Quant-model. Therefore, inflation could turn out up to a quarter of a percentage point higher than the model expects.

All in all, we expect the inflation to rise to 2.5% in December 2024 and to fall significantly in the following months. We expect an inflation of 2.1% (core inflation: 2.3%) on average next year.

Chart 5 - We expect a somewhat higher inflation than the Quant-model

Consumer price index in the euro area, year-on-year rates in %, past and future Commerzbank forecasts



Source: Eurostat, Commerzbank forecasts

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