

ANALYSIS– Rising energy prices will lead to higher inflation this year

Energy prices have risen as a result of the war in the Middle East. In the main scenario, this is assumed to affect inflation in the coming months and is expected to lead to CPIF inflation being higher this year than in the Riksbank's forecast from December. At the same time, there are several factors holding inflation down. Resource utilisation is low, the krona has appreciated and several taxes with a direct impact on the CPIF, not least VAT on food, are being reduced. Thus, despite the rise in energy prices, inflation is not expected to exceed the target this year. However, the factors holding down inflation are expected to have a diminishing impact on inflation from next year onwards. At the same time, energy prices are not expected to continue rising, but to affect inflation mainly this year.

Rising energy prices to push up inflation this year

Energy prices have risen more than expected in the past few months. The war in the Middle East pushed the price of Brent crude oil to more than USD 100 per barrel in early March, from levels of around USD 65 per barrel in January and February.⁴⁵

Natural gas prices have also risen as a result of the war, as major producers of liquefied natural gas are located in the region. This has contributed to electricity prices rising at the beginning of March, primarily in southern Sweden.⁴⁶ These price increases will continue to affect inflation in the coming months and mean that CPIF inflation is expected to be higher this year than in the Riksbank's December forecast.

When energy prices rise, they have a direct impact on measured CPIF inflation, as motor fuels and household electricity prices are included in the CPIF. Together they account for just over 6 per cent of the CPIF, divided into approximately 3 per cent each. The prices of motor fuels and household electricity are closely linked to prices in energy commodity markets but vary much less, as the price paid by the consumer also includes, for example, taxes, network tariffs and mark-ups from different stages of the supply chain.⁴⁷ Figure 34 shows how CPIF inflation would develop if the direct effects of even higher energy prices were included in the CPIF. The dashed turquoise line

⁴⁵ Brent oil is a type of crude oil. It is used as a benchmark for oil prices in many parts of the world, especially in Europe.

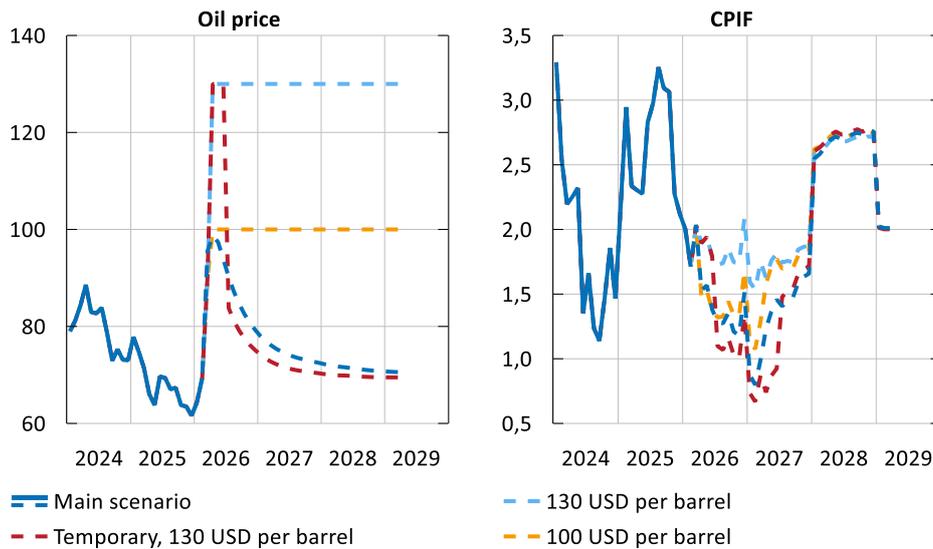
⁴⁶ Natural gas is used to produce electricity in Europe and higher natural gas prices therefore affect electricity prices. High prices in northern Europe usually spill over to southern Sweden in particular, as there are many electricity cables connecting southern Sweden to the continent. Prices in northern Sweden are not affected as much as there are limitations on how much electricity can be transported from northern to southern Sweden.

⁴⁷ Around 60 per cent of the price of fuel is normally tax. In the electricity price paid by the customer, network tariffs and taxes account for around 2/3 of the price. However, these shares depend on the commodity price of energy as the taxes are expressed as a percentage per unit. The higher the commodity price, the smaller the tax share.

shows, for example, that if the oil price were to rise to USD 130 per barrel and remain there, CPIF inflation would be around 1 percentage point higher than in the main scenario this year.

Figure 34. Oil price and CPIF in the main scenario and in various mathematical examples with direct effects of higher energy prices

USD per barrel (left) and annual percentage change (right)



Note. On the left, the oil price in USD is shown in the main scenario and in a few alternative scenarios. The right-hand side shows what CPIF inflation looks like in the main scenario and if direct effects on fuel prices from the oil price scenarios were to be included.

Sources: Intercontinental Exchange, Statistics Sweden and the Riksbank.

Energy prices also affect inflation with a lag

But energy prices also have lagged indirect effects on inflation because they affect business costs. In this way, they can also affect the CPIF excluding energy. An example of an indirect effect is when fuel prices rise and increase the costs of taxi companies, causing them to raise their fares. Another example is when higher electricity prices increase the cost of a bakery that compensates by increasing the price of its bread. In both cases, it is therefore a matter of companies eventually passing on higher costs to consumers. At the same time, rising natural gas prices in Europe can have spillover effects on Swedish inflation via rising prices for Swedish imports. But when energy prices rise, this can also affect inflation expectations, for example through higher wage demands from employees and by making companies more inclined to raise prices. These types of lagged effect on inflation are known as second-round effects.

The lagged effects are much more difficult to quantify than the direct effects, and depend on a variety of factors such as demand and competition in the industry in which the company operates. Their size also depends on how much energy prices rise and how long the change is expected to last. Monetary policy can mitigate the effects by ensuring that inflation expectations remain anchored around the target. If demand is weak, competition is high, inflation expectations are well anchored and the price

increase is expected to be short-lived, the lagged effects will be smaller, and vice versa.

The rising energy prices are expected to have some lagged effects on Swedish inflation. However, in the Riksbank's forecast, the lagged effects are still expected to be limited. The evidence in favour of this is that demand is subdued and that forward pricing indicates that the price increases are temporary, as prices a year from now and beyond will not have changed much. And at the same time, inflation expectations are well anchored. In addition, there are several other factors holding down inflation this year.

Inflation excluding energy prices has fallen in recent months

The rate of increase in the CPIF excluding energy has fallen in recent months. The fall in inflation from last year's slightly higher levels was predicted in the Riksbank's forecasts throughout last year. These forecasts were based, among other things, on the assumption that food prices would increase more slowly, that what is known as the basket effect would normalise and that the appreciation of the krona in 2025 would start to have an increasing pass-through to consumer prices. Now, after a few months of lower inflation, we can see that both the rate of increase in food prices and the basket effect have been roughly as expected in the forecasts made in 2025. The rate of increase in goods prices has also fallen roughly as expected relative to the forecasts made at the end of last year, suggesting that the pass-through of the krona appreciation to goods prices has been roughly as we expected. On the other hand, services prices have increased more slowly than expected.

The krona appreciation last year will drag down inflation this year

The appreciation of the krona in 2025 will help to dampen inflation this year. It is difficult to determine exactly how large an effect changes in the exchange rate have on inflation and the effect also varies over time. Among other things, the Riksbank bases its inflation forecasts on estimated models. In these, the exchange rate pass-through is often linear and based on historical relationships.⁴⁸

There are many indications that the pass-through has been greater than normal in recent years. We have been in a "high inflation regime" where business costs and demand have fluctuated widely and companies have passed on higher costs to their selling prices to a greater extent than before. This also applies to changes in costs resulting from movements in the krona exchange rate.⁴⁹ When we have also included recent years in our inflation models, the estimated pass-through has thus gradually become somewhat larger.

⁴⁸ See the article "The impact of the exchange rate on inflation in *Monetary Policy Report*, December 2016, Sveriges Riksbank.

⁴⁹ See, for instance, S. Durakovic, J. Johansson and O. Tysklind (2025), "Lessons from the hyperinflationary period", *Economic Review*, 2025:2, Sveriges Riksbank; the article "The pass-through of the krona to inflation appears to have been larger than usual", *Monetary Policy Report*, November 2023, Sveriges Riksbank; and C. Borio, M. Lombardi, J. Yetman and E. Zakrajšek (2023), "The two-regime view of inflation", BIS papers No 133, Bank for International Settlements.

Over the course of last year, the krona appreciated by around 10 per cent and the Riksbank assesses that this has contributed to a fall in inflation in Sweden. However, it is difficult to say with certainty whether we are now back to a situation where the exchange rate pass-through is historically normal. However, the fact that goods prices have developed roughly as expected in the Riksbank's forecasts, which are based on historically estimated relationships, is an indication that the krona has had a roughly average pass-through in recent months.

Inflation excluding energy prices expected to be higher next year

There are several factors contributing to the expected rise in inflationary pressures over the coming year. In the Riksbank's forecast, the krona will remain at approximately its current level in the coming years. This means that the dampening effect of the exchange rate on inflation will gradually diminish and be almost non-existent from the middle of next year.

At the same time, the Riksbank assesses that the low resource utilisation of recent years will gradually stop holding down inflation. Resource utilisation has already started to increase and is expected to be close to normal next year. This means that it will also cease to dampen inflation, albeit with some lag.⁵⁰ The growth rate in unit labour costs is also expected to rise from the low levels of 2025 and to return to more normal levels from this year onwards. It also affects inflation with a slight lag.

There were also some one-off effects in the inflation outcomes at the beginning of the year, which will fall out of the 12-month comparisons from next year. Around 0.2 percentage points of the decline in the rate of increase in the CPIF excluding energy in January was due to an increase in dental subsidies. This has a temporary effect on measured inflation in 2026 that will no longer affect inflation after one year. This will contribute to an increase in inflation of 0.2 percentage points in January 2027.

The Riksbank assesses that the reduction in VAT on food will also have temporary direct effects on inflation. The VAT will be reduced from 12 to 6 per cent during the period April 2026 until the end of December 2027. As a result, the measured inflation rate, as measured by the annual percentage change in the CPIF and the CPIF excluding energy, will be held down over the period April 2026 to March 2027. Thereafter, the annual percentage change is not affected until VAT is increased again, driving up inflation in 2028. If the VAT cut has full pass-through, which is assumed in the Riksbank's forecast, it will hold down the measured inflation rate by 0.8 percentage points from April this year and one year ahead.

Overall, then, there are reasons to believe that inflation will not exceed the target this year, despite the rapid rise in energy prices, but that it will be close to target from the middle of next year. However, as described in the alternative scenarios, developments may also turn out to be significantly different.

⁵⁰ See, for example, C. Flodberg, M. Hesselman and M. Löf (2022), "Can inflation forecasts be improved by using alternative measures of labour market slack?", *Staff memo*, November 2022, Sveriges Riksbank for an illustration of the correlation between different measures of resource utilisation and inflation.