

ANALYSIS – The impact of the war in the Middle East on Swedish inflation

According to the Riksbank's forecast, inflation is expected to be higher than it would otherwise have been this year and next year as a result of the war in the Middle East. Rising oil prices affect inflation both directly, through fuel prices, and indirectly, through higher costs for companies. The indirect effects are likely to be non-negligible but are not directly discernible in the statistics, and different methods of estimating them yield different results. The war has also driven up prices for other commodities from the region, which may also fuel inflation, particularly through imported goods. At the same time, however, fuel tax cuts have both been implemented and announced, which reduces the costs increases faced by companies.

The war in the Middle East is affecting inflation both directly and indirectly

The most immediate consequence of the war in the Middle East was a rise in oil prices. Oil prices have a direct impact on CPIF inflation, as petrol and diesel prices are included in it. If, for example, the price of crude oil rises from USD 70 to USD 100 per barrel, as it did when the war broke out, the CPIF increases by 0.4–0.5 per cent immediately in the same month. However, rising oil prices also have an indirect impact on inflation, as they increase companies' costs, which are then usually passed on to end customers to a greater or lesser extent. The indirect effects are likely to be non-negligible but are not directly discernible in the statistics.

The indirect effects can be estimated using an input-output model

Using a so-called input-output model, it is possible to calculate how a change in the price of oil spreads through the economy. These calculations suggest that an oil price increase from USD 70 to USD 100 per barrel, could have an indirect effect that is twice as large as the direct effect and push up the CPIF excluding energy by a maximum of around 0.9 per cent.³⁷

One advantage of an input-output model is that it is based on companies' actual costs and the proportion of those costs attributable to oil products. It also takes into account the impact of oil being used in other products, such as plastics. The analysis therefore provides an indication of the possible total magnitude of the price changes

³⁷ The estimate has been retrieved from an input-output model that analyses prices based on companies' intermediate consumption and labour costs, see Glans, E. (2019) "PRIOR – NIER's input-output based cost-push price model", Other publication, National Institute of Economic Research, September 2019. See also the discussion in "Price and Cost Trends 2019–2023: Analysis with a price model", Special studies, December 2023, National Institute of Economic Research.

in the consumer channel if companies were to choose to pass on the full cost increase. However, it provides no information on how quickly or to what extent companies have previously adjusted their prices in response to a rise in the price of crude oil. Nor does it capture second-round effects arising from, for example, rising inflation expectations, changes in pricing behaviour or higher rates of wage growth. At the same time, the analysis assumes that prices will remain permanently higher, and disregards the fact that the impact would be less if oil prices were to fall again.

Indirect effects can also be estimated using econometric methods

Another way of estimating the indirect effects is to use models based on historical data. Rather than assuming a direct and complete pass-through, an econometric method is used to calculate the average historical relationship between oil prices and inflation.

The Riksbank published such an estimate from a VAR model in 2008. It suggested that, on average, the indirect effects had been roughly as large as the direct effects but spread over two years.³⁸ The National Institute of Economic Research reported similar results in a study from 2016.³⁹ Both studies estimated the impact on inflation of a permanent 10 per cent change in the price of oil. According to them, the CPIF excluding energy could rise by 0.4–0.5 per cent if the price rose from USD 70 to USD 100. However, the assumption that oil prices will remain permanently higher is not particularly realistic, and the effect would be less significant if oil prices were to fall again.

A more recent study by the Riksbank estimates the effects of oil price shocks.⁴⁰ In it, the pass-through of a change in oil prices to the CPIF excluding energy is roughly twice as large as the direct effect on the CPIF. If the price of oil rises from USD 70 to USD 100, this could push up the CPIF excluding energy by around 0.9 per cent after about a year. However, the result is sensitive to the estimation period chosen. If the estimates are based on data from the period prior to the year with high inflation 2022 and 2023, the effects are smaller and more in line with previous econometric studies.⁴¹

Prices are affected to varying degrees and at different speeds

Different prices are affected to varying degrees and at different speeds by a change in the price of oil. Figure 26 presents the results of model estimates showing that transport prices (where fuel costs are included) are affected relatively directly, while prices for other, more service-intensive consumption are affected at a later stage.

³⁸ See M. Bjellerup and M. Löf, "The effects of the oil price on inflation in Sweden", Economic Commentaries no. 4, 2008, Sveriges Riksbank.

³⁹ See Article: "The significance of crude oil prices for consumer prices", Swedish Economy Report, March 2016. National Institute of Economic Research.

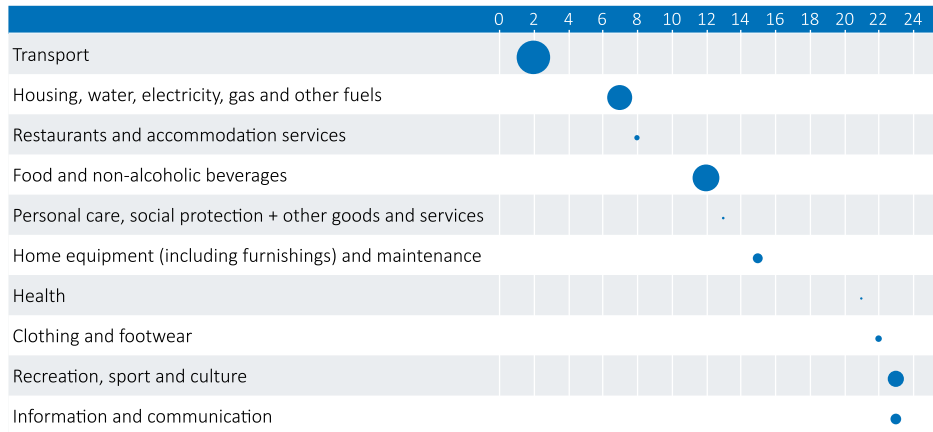
⁴⁰ See A. Czarnota (2026), "The Effects of Oil Price Shocks on the Swedish Economy", Staff Memo, June, Sveriges Riksbank

⁴¹ The data suggests that the pass-through may be greater during periods of high inflation. We have recently been in a "hyperinflationary regime" where business costs and demand have fluctuated more than usual, and companies have passed on more of their costs to their selling prices to a greater extent than before. See, for example, S. Durakovic, J. Johansson and O. Tysklind (2025), "Lessons from the hyperinflationary period", article in Economic Review, 2025:2, 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.

Changes in transport prices have the greatest impact on inflation, followed by food prices and housing costs.

Figure 26. Estimated effects of oil prices on various components of the CPIF

Time to maximum effect (months) and relative effect magnitude



Note. The figure shows the time lag between a change in the oil price and the point at which the maximum effect on the price level is reached. The size of the bubble indicates the contribution to total CPIF inflation, calculated as the maximum effect multiplied by the weighting of the respective index. The maximum effect is based on calculations in the Staff Memo ‘The Effects of Oil Price Shocks on the Swedish Economy’, June 2026, Sveriges Riksbank.

Sources: Statistics Sweden and the Riksbank.

The war has also affected other commodity prices

Since the war broke out, prices for other commodities produced in the Middle East have also risen. This also applies to commodities that do not normally rise in price alongside oil prices, such as natural gas, helium, sulphur and urea. There is also a risk of shortages of certain inputs arising. All this could fuel inflation.

However, whilst commodity prices have risen, energy taxes have been cut, both in Sweden and abroad. The government is expected to cut taxes further, which means that fuel prices in Sweden will return to levels close to those seen before the war broke out. This helps to prevent companies’ energy costs from rising as a result of the war and reduces their need to raise prices for end customers.

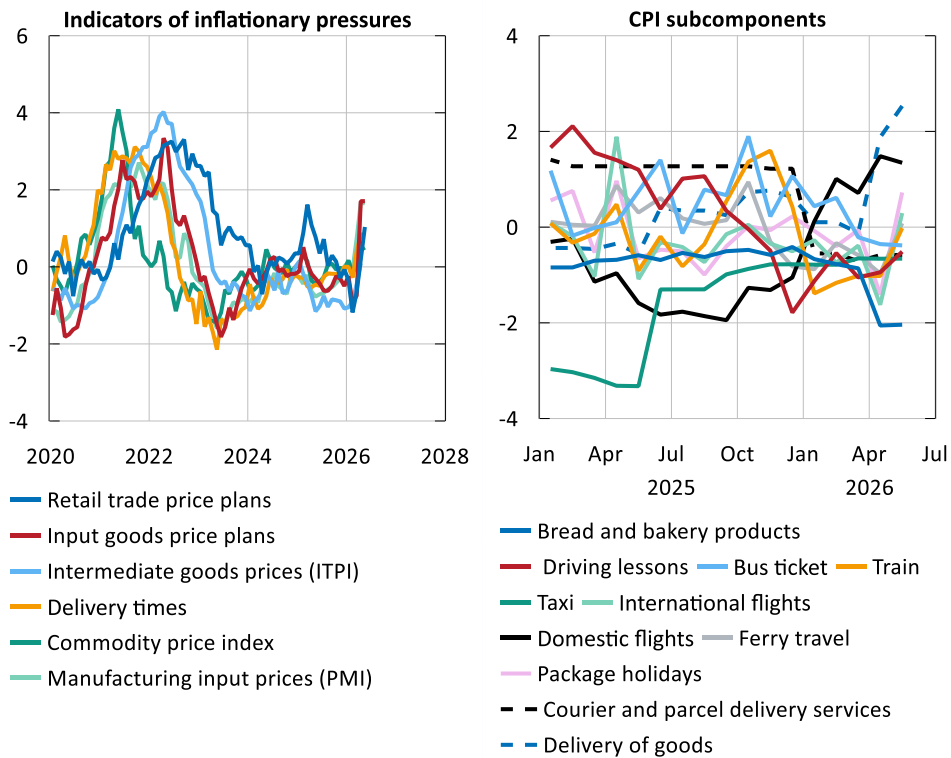
Indicators point to increased cost pressures at an early stage

Survey data up to and including May shows an increase in the monthly indicators of price developments in the early stages of production. These indicators should provide an early indication of whether inflationary pressures are on the horizon. For example, Figure 27 shows that price plans among input-producing companies and the companies’ assessments of their own input prices have risen. Companies also report that delivery times have increased slightly, which may be an indication of a shortage of certain inputs. However, the increases are not as significant as those seen in 2021 and 2022 following the pandemic and Russia’s invasion of Ukraine, and there are as yet no clear signs of unusual price rises in more consumer-facing sectors. In the Riksbank’s

Business Survey, companies state that there is no shortage, but that costs have risen, which they are expected to pass on, in part, to end customers.⁴²

It is also possible to track price developments on a more detailed level in the consumer channel, where the pass-through of higher costs should first become apparent. The statistics up to and including May show no clear signs yet that consumer prices have started to rise more rapidly for any particularly energy-intensive goods (see Figure 27).

Figure 27. Indicators of price pressures and energy-intensive sub-groups in the CPI
Standard deviation



Note. Inputs in the producer channel (ITPI) and the commodity price index are measured as annual percentage change, Purchasing Managers' Index (PMI) as an index and price plans as net figures (left). Sub-groups in the CPI are measured as an annual percentage change (right). The series have been standardised from year 2000.

Sources: The Economist, National Institute of Economic Research, Statistics Sweden, Swedbank and the Riksbank.

War in Middle East contributes to higher inflation

Overall, the war in the Middle East and rising energy prices are expected to have some, albeit limited, indirect effects on Swedish inflation. The evidence suggesting the effects will be limited is that demand is subdued and that, according to futures pricing, oil prices are only expected to be high temporarily. Furthermore, longer-term inflation expectations are well anchored. In addition, there are several other factors

⁴² See "A new black swan delaying the recovery", The Riksbank's Business Survey, May 2026.

keeping inflation down this year, including the tax cuts on fuel that have been implemented and announced, which, among other things, are reducing fuel costs for both households and companies. The indirect effects are expected to push up CPIF inflation by at most around 0.4 percentage points in 2027.