Forecast

Alternative scenario: Russia's war in Ukraine could lead to a recession in Finland

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This alternative scenario examines what impact Russia's war in Ukraine could have on the Finnish economy in the worst case. The scenario describes a situation where an escalation of the war causes the global economy to slacken more dramatically than in the baseline forecast, with weaker financing conditions, energy availability problems and exacerbated supply chain disruptions. Compared to the Bank of Finland's June 2022 baseline forecast, a deepening crisis could drive the Finnish economy into recession, at the same time accelerating inflation significantly in the immediate years ahead. Unemployment would rise as output falls.



Russia's war in Ukraine threatens to push the entire euro area economy into recession if the

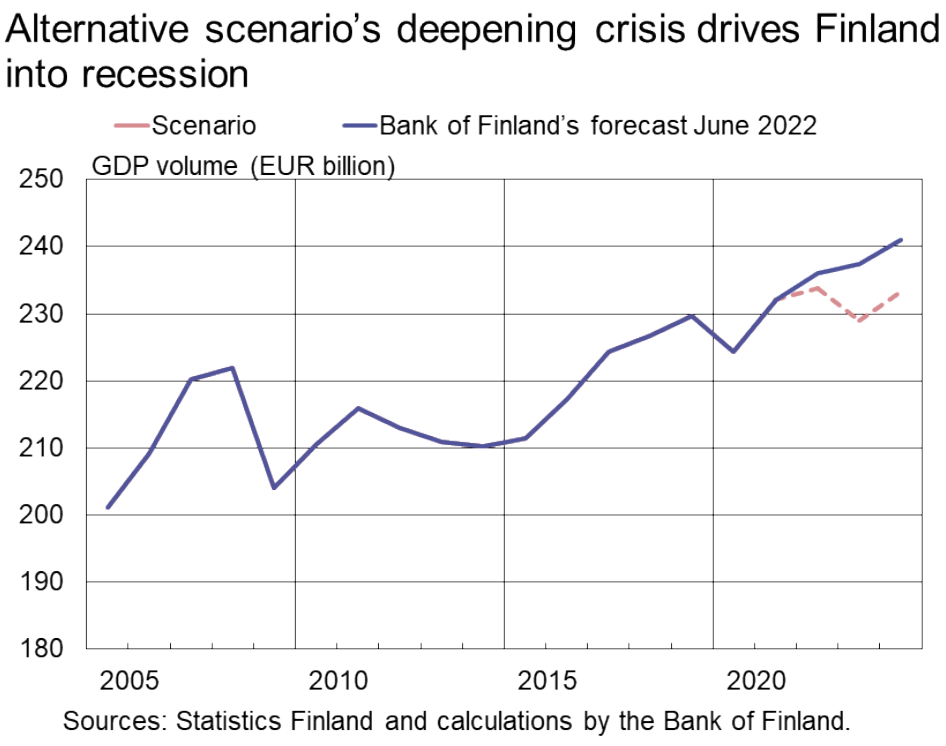
situation escalates and lasts longer than assumed in the baseline forecast. Restrictions on imported energy from Russia could cause energy availability problems and raise prices in both Finland and the rest of the euro area.

Compared to the baseline forecast, this alternative scenario features greater disruption in energy availability, and a higher and more prolonged increase in raw material prices. In addition, the substantial slowdown in economic growth in the euro area under the alternative scenario will weaken the Finnish economy more than in the baseline forecast. The assumption is also made that financing conditions will become tighter and interest rates will rise.

The scenario also includes greater uncertainty and a slower adjustment of the economy. All of this will mean that in the immediate years ahead Finland will be driven into recession, accompanied by a significant increase in inflation. The alternative scenario also assumes that the war could result in a prolonged contraction in Finland's export markets and disruptions in the energy supply, leading to a fall of 2% in Finland's GDP in 2023. In other words, economic growth in 2023 would be 2.5 percentage points less than in the baseline scenario.

The alternative scenario was built using the Bank of Finland's Aino model.

Chart 1.



Decreased dependence on imported energy from Russia

Finland's dependence on imported energy products from Russia has diminished in recent years. Since the start of the war, imports of energy from Russia have been in steep decline. Finland has imported not just crude oil from Russia, but also gas, electricity, coal and considerable volumes of refined fuels and other energy products. Energy from Russia is used both in industry and by households. Imported energy is needed especially for the processes used by the forest and chemical industries, both major sectors in Finland. The metal and food industries are also to some extent dependent on imported energy.

If industrial users' access to energy were to be impeded, this could lead either to temporary standstills in production or, in the worst case, permanent closures. This would be the case in particular if the shortfall in imported energy could not be made up through the use of domestic energy sources or by importing energy from other parts of the world. Disruptions in production and curtailed economic growth would follow.

Finland's dependence on Russia for energy has diminished in recent years and months, which eases the direct harm resulting from sanctions and the ending of energy product imports. Most of the goods imported by Finland from Russia are energy products. According to statistics from Finnish Customs, Finland's imports of energy products from Russia in 2021 were worth approximately EUR 5 billion, of which EUR 3.7 billion accounted for unrefined fuels and lubricants. Finland's imports of goods from Russia in 2021 accounted for around 12% of all its imported goods. In 2021, Russia accounted for 5.4% (or EUR 3.7 billion) of all Finnish exported goods.

The figures for recent months suggest that imports from Russia have decreased further. According to statistics from Finnish Customs, the value of imports from Russia roughly halved in April compared with February. Much of this is explained by the reduction in imports of crude oil and oil products. In February, imports of mineral products (meaning crude oil, coal, oil products, natural gas and electricity) were worth EUR 619 million. In April the figure was EUR 277 million.

The war could weaken the economic operating environment in Finland more than anticipated

In the alternative scenario, the economic disruption affecting the euro area is assumed to be greater and more prolonged than in the baseline scenario (Table 1). The assumption is made that economic sanctions and ever greater difficulties with production and in supply chains will cause problems for international trade. In addition, supplies of energy from abroad will be disrupted and some energy and refined energy products will simply be unavailable.

		Transmission channels	
	Duration of tensions	**Foreign trade**	**Energy and raw materials**
Baseline forecast	War's most intensive phase continues until end of 2022	Disruptions in trade with Russia	EU-imposed gradual ban on crude oil imports; all crude oil obtainable from elsewhere
	Sanctions kept in place until 2024	Disruptions to global supply chains	Short-term rise in crude oil and gas prices; market expectations of falling prices in longer term
Scenario	War drags on and intensifies until 2023	Major disruptions to trade with Russia, including boycotts of Russian products	EU imports of Russian energy end; not all can be replaced immediately
	Additional sanctions in place until 2024	Major disruptions to global supply chains	Prolonged rise in energy costs
	Geopolitical tensions continue until 2024	Abandoning Russian energy causes production disruptions that only ease in mid-2023	Food raw materials (incl. grain) suffer supply disruptions and prolonged price rises

In this scenario, the war's escalation and the energy availability problems will affect the euro area economy significantly and, as a result, Finland's export markets too, which will contract considerably (*see downside scenario in Eurosystem macroeconomic projections*). The scenario also makes the assumption that companies will in the main not immediately be able to find replacement markets elsewhere.

In addition, the growth in Finland's export markets comes to a halt in 2022 and contracts significantly in 2023. However, the export markets starts to recover at the end of the forecast period, when supply disruptions and uncertainty begin to fade. The effects of an escalation in the war and the problems of energy availability, however, will be prolonged, and the export markets in 2024 will continue to be around 5% smaller than in the baseline forecast, in spite of the partial upturn in global demand.

The war is assumed not to extend beyond Ukraine, but it is assumed to escalate and to be protracted, with geopolitical tensions not starting to ease until 2024. The scenario also assumes

increased uncertainty, tighter financing conditions and higher interest rates as a result of bigger risk premia.[1]

The scenario makes the assumption that imports of oil and gas from Russia will end completely, but that it will nevertheless be possible to acquire most of the energy and refined energy products from other markets or replace them with other energy sources. However, this will become more difficult if all the other countries in the euro area are also urgently and simultaneously seeking to acquire replacement energy products in global markets.

The scenario makes the assumption that crude oil imported from Russia can be completely replaced with other oil grades, such as North Sea Brent Crude. For example, Neste Oyj has stated that it was able to replace 85% of the crude oil it imports from Russia by the start of April and the rest will be replaced soon. However, some gas and refined energy products cannot be fully replaced any time soon. Altogether, it is assumed that some 5% of imported energy will not be replaced in the short term. This corresponds to around EUR 500 million at 2021 prices and it is estimated that this will decrease total output by approximately 0.4%.[2]

The reduced availability of energy products will push up the global prices of crude oil and other raw materials to a level significantly higher than in the baseline forecast (Table 2). The prices of competitors' exports will also increase faster. The substantial rise in the prices of crude oil and other raw materials will be reflected, after a time lag, in higher global prices generally, which will surge higher especially in 2023.

The scenario also includes the assumption that emergency energy stocks will not be used to compensate for the shortfall in supply caused by the decrease in energy imports. But if emergency stocks were to be used to boost supply, the detrimental effects would be smaller.

Scenario's external assumptions		
		2021
Export markets (%)	Baseline forecast	10.5
	Scenario	10.5

Scenario: The crisis will deepen and Finland will be driven into recession. Baseline forecast: Bank of Finland June 2022 forecast tra
** Deviation in percentage points.*
*** Deviation in dollars.*
f = forecast.
Sources: ECB and Bank of Finland.

Scenario's external assumptions		
	Deviation*	0.0
Competitors' export prices (%)	Baseline forecast	10.6
	Scenario	10.6
	Deviation*	0.0
Crude oil ($)	Baseline forecast	70.5
	Scenario	70.5
	Deviation**	0.0
Raw materials (%)	Baseline forecast	44.9
	Scenario	42.1
	Deviation*	-2.8

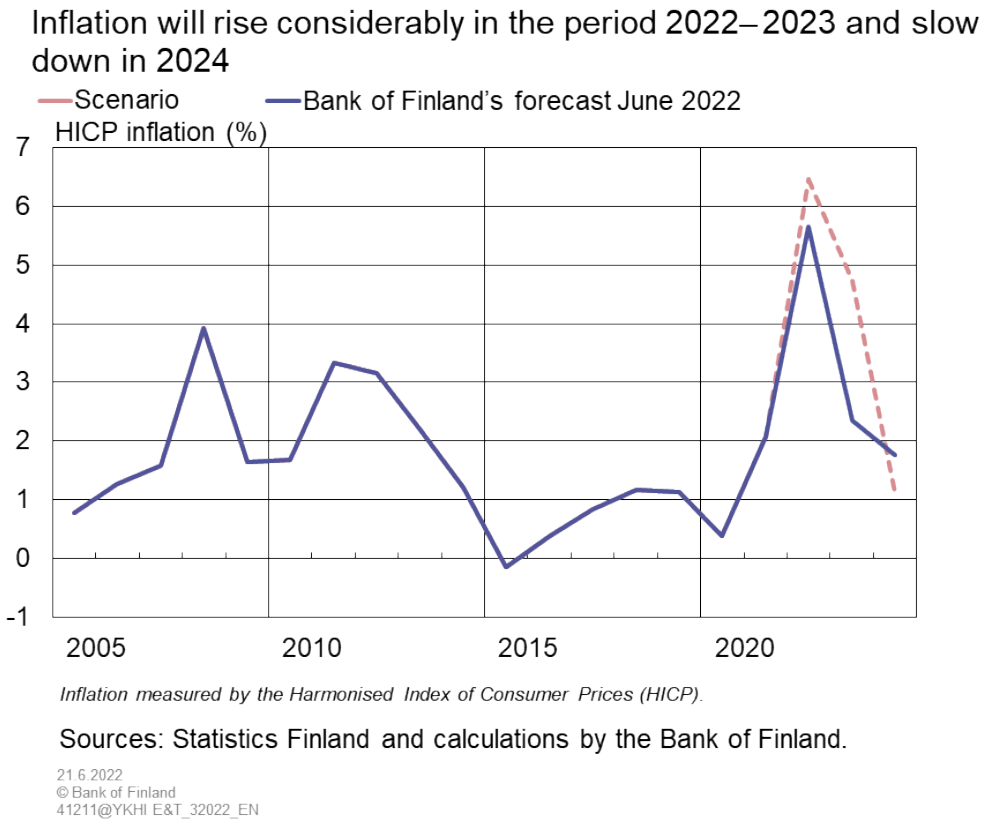
Scenario: The crisis will deepen and Finland will be driven into recession. Baseline forecast: Bank of Finland June 2022 forecast tra
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Sources: ECB and Bank of Finland.

Finnish economy will contract in 2023

The long-term difficulties in export markets and the disruption of energy supplies together with a sharp rise in prices and increased uncertainty will drive the Finnish economy into recession, according to this alternative scenario. GDP growth will slow to 0.5% in 2022, and GDP will shrink by 2% in 2023 (Chart 1). In 2024 the economy will start to recover and GDP growth will return to 1.8%. Despite the recovery, the effects will be long lasting, because output in 2024 will still be more than 3% below the baseline forecast. The loss of GDP in the period 2022–2024, compared with the baseline forecast, will amount to EUR 18 billion. Unemployment will also increase, but will begin to fall in 2024 as the economy starts to grow again (Table 3).

Under the alternative scenario, inflation will accelerate to 6.5% in 2022 and remain high at 4.7% in 2023, so the erosion in household purchasing power will be significantly greater than in the baseline forecast. However, inflation will eventually start to return close to the 2% target, as the price of energy normalises and overall demand slackens.

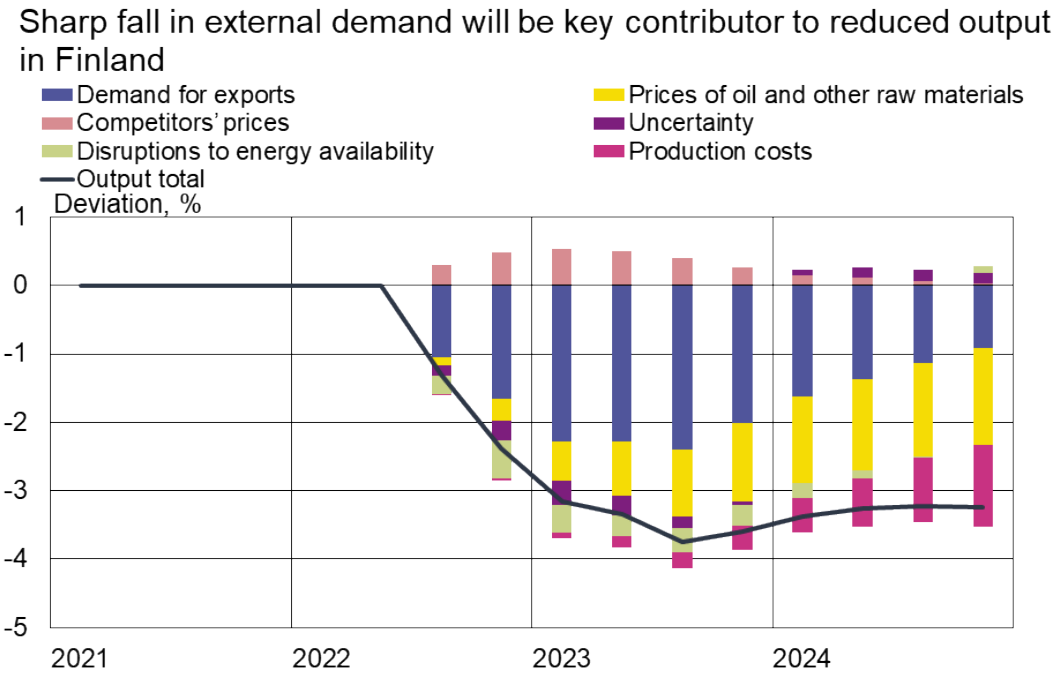
Chart 2.



Inflation will accelerate in 2022, mainly as a result of the sharp rise in the prices of energy and raw materials and disruptions in energy availability (Chart 2). The increase in the cost of energy and raw materials will push up the prices of imported goods, which in turn will affect the domestic prices of intermediate goods and end products. In 2023, inflation will continue to be significantly higher than in the baseline forecast. The fall in energy and raw material prices in 2023 and 2024 will bring down inflation, as measured by the Harmonised Index of Consumer Prices (HICP), to about 1% in 2024. Underlying inflation, which does not include changes in energy and food prices, will nevertheless be around 2% in 2024.

The contraction in Finland's export markets in the scenario will clearly be the biggest problem for the Finnish economy (Chart 3). Exports will decrease significantly as export markets decline, and it will not be possible to compensate for this by exporting elsewhere in the short term. Furthermore, the surge in energy and raw material prices will reduce output significantly. The sharp contraction in export markets and the rise in inflation together with increased uncertainty will have the effect of reducing investment and household consumption.

Chart 3.



The chart shows which structural factors result in a fall in output as calculated using the Aino model. The result is shown as a deviation (%) from the Bank of Finland June 2022 forecast. The uncertainties in the chart include a tightening of financing conditions and a rise in risk premia.

Source: Bank of Finland.

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The direct effect of the energy availability problems on output will be at its greatest in 2022 and 2023 (Chart 3). This will start to ease at the end of 2023 as energy is acquired from other sources.

The increased uncertainty under this scenario will be transmitted to the Finnish economy mainly via two channels. Wariness on the part of households will dampen consumption growth, and businesses will show greater caution when it comes to investment. At the same time, loan rates are expected to increase, as the risk premia go up and financing conditions become tighter. Imports will also fall significantly in 2023 with the decline in consumption and investment.

The prices of exports from competitor countries will rise slightly, which will help boost the exports of Finnish companies and, consequently, output. It is assumed in the scenario that the increase in labour costs will be about the same as in the baseline forecast. Output will therefore fall slightly more compared with a situation where the rise in labour costs would be dampened by negative shocks that were more serious than expected (Chart 3).

Clearly there is much uncertainty associated with how the war will play out and its effects on the economy. Of course, no one knows how long Russia's war will last. It is also uncertain whether there will be disruptions to energy imports, and if so, how long they would last. Nor is it clear when and to what extent a shortfall in energy imports could be replaced, or how quickly new export

markets might be found. However, the direction of the war's impacts on the economy is clear. The war in Ukraine is curbing economic growth and driving up inflation both in Finland and the rest of the euro area.

Effect of a deepening crisis on the Finnish economy

		2021	2022[f]	2023[f]	2024[f]
Gross domestic product, annual growth (%)	Baseline forecast	3.5	1.7	0.5	1.5
	Scenario	3.5	0.7	-2.0	1.8
	Deviation**	0.0	-1.0	-2.5	0.3
Unemployment rate (%)	Baseline forecast	7.6	6.5	6.5	6.4
	Scenario	7.6	6.7	7.6	7.4
	Deviation**	0.0	0.2	1.1	0.9
Inflation* (%)	Baseline forecast	2.1	5.6	2.4	1.8
	Scenario	2.1	6.5	4.7	1.1
	Deviation**	0.0	0.8	2.4	-0.6

Scenario: The crisis will deepen and Finland will be driven into recession. Baseline forecast: Bank of Finland June 2022 forecast trajectory.
** Harmonised Index of Consumer Prices.*
*** Deviation in percentage points.*
f = forecast.
Sources: Statistics Finland and Bank of Finland.

Notes

1. The assumption is that uncertainty in the second half of 2022 will correspond to ¾ of the level of uncertainty felt during the worst phase of the COVID-19 pandemic. Interest on company borrowing is expected to increase by an average of just under one percentage point above that assumed in the baseline forecast. ↑
2. To assess the direct impact, calculations of the impact on the Finnish economy of disruptions to the energy supply were made using the VATTAGE model. (Juha Honkatukia ↑

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Keywords

energy, forecast, GDP, inflation, oil, recession, scenario, uncertainty