

## ARTICLE – Economic consequences of the war in Ukraine

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Russia's invasion of Ukraine has caused a humanitarian disaster in one of Europe's most heavily populated countries. Alongside the human suffering in Ukraine, this act of war has also triggered the fastest growing refugee crisis in Europe since the Second World War.

It is difficult to gain an overview of the economic consequences, which will largely be determined by decisions yet to be made on European security and trade policies. It is uncertain how much access there will be to several important raw materials such as oil, natural gas and cereals. World market prices for fossil fuels have risen and energy prices in Europe have risen significantly. Higher prices for energy and food are pushing inflation up in a situation where the rate of price increases is already high in several countries.

Several factors suggest that growth in the European Union and Sweden will be lower this year compared with expectations before the outbreak of the war. However, it is difficult to assess how much growth will be restrained and how long-term the effects will be. To illustrate this uncertainty, two different scenarios for the future development are discussed below, together with the economic policy trade-offs that may become relevant.

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### **Russia and Ukraine are important commodity exporters**

EU economic exchanges with Russia are dominated by trade in fossil fuels. The value of imports from Russia of coal, petroleum products and natural gas has been about twice as large in recent years as the value of all other imports of goods from Russia (see Figure 52). About 30 per cent of Member States' total imports of fossil fuels have come from Russia and several individual countries, such as, Austria, Germany and Poland, have had more than half of their imports of natural gas from Russia.

In addition, Russia is an important exporter of fertiliser, sunflower oil and cereals, as well as some metals that are hard to replace in the production of certain specific goods.<sup>57</sup> Other EU trade relations with Russia are comparatively small and direct

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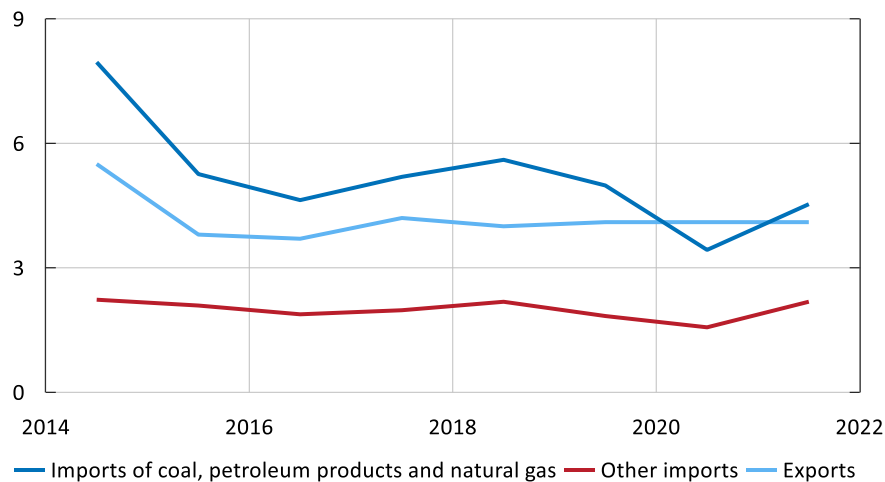
<sup>57</sup> Russia is an important exporter of palladium, nickel and platinum, which are used in the production of catalytic converters, semiconductors and batteries.

financial exposures towards Russia are limited.<sup>58</sup> Ukraine is a significantly smaller trading partner for the EU than Russia but, despite this, is a major exporter of certain specific goods, such as fertiliser, sunflower oil and cereals.

Following Russia's annexation of Crimea in 2014 and the subsequent aggression in eastern Ukraine, the EU agreed on economic sanctions against Russia. Since then, Sweden's trade with Russia has decreased considerably, particularly as regards imports of fossil fuels. Last year, Sweden imported Russian crude oil for a total value of SEK 7 billion, corresponding to 8.5 per cent of total crude oil imports. In comparison, it can be mentioned that, in 2014, Russia was responsible for almost half of Sweden's supply of crude oil. Russia's significance as a Swedish export market is fairly small, not least considering the country's population and relative proximity. In 2021, less than 1.5 per cent of Sweden's goods exports were to Russia.

**Figure 52. EU trade in goods with Russia**

Percentage of total EU imports/exports of goods



Note. The statistics refer to the trade in goods between Russia and the 27 countries that are Member States of the European Union as of February 2020 (EU27). The value of this trade is expressed in euros and is shown as a proportion of the value of the overall external imports and exports, respectively, of goods by the EU27.

Sources: Eurostat and the Riksbank.

### Extensive economic sanctions against Russia

Following Russia's invasion of Ukraine on 24 February of this year, the European Union, United States, United Kingdom and several other countries have imposed comprehensive economic sanctions against Russia. These comprise trade restrictions and increased import duties, restricted possibilities for investment in Russia, and sanctions against individuals and a number of Russian banks and financial institutions. Among other things, several Russian banks have been excluded from EU and US

<sup>58</sup> EU exports to Russia are significantly less comprehensive than imports from Russia. Last year, Russia stood for about 4 per cent of total EU goods exports. In comparison, the two most important export markets for the EU, the United States and United Kingdom, stood for 18.3 and 13.0 per cent of goods exports, respectively.

capital markets and from SWIFT, which conveys information on payments between banks and financial institutions.<sup>59</sup> It has also been made illegal to conduct transactions with the Central Bank of the Russian Federation.<sup>60</sup> In addition, the European Union, United States, United Kingdom and Canada have closed their airspace to Russian aircraft.<sup>61</sup>

Australia and the United States have prohibited imports of fossil fuels and the UK has the goal of making the country entirely independent of Russian coal and oil by the end of the year.<sup>62</sup> The EU has decided to sanction imports of coal, which corresponds to about 6 per cent of the value of total imports of fossil fuels from Russia. Several governments within the EU also advocate measures to restrict imports of natural gas and oil, and the Baltic countries have already halted their imports of Russian natural gas. However, the EU has not taken any joint decision on an import embargo for natural gas and oil.<sup>63</sup> Such a decision would probably entail significant costs for both households and companies.<sup>64</sup> Russian gas is particularly difficult to replace because Russia is such a dominant supplier to several European countries and because there is a lack of capacity for shipping liquefied natural gas in the quantities that would be needed under an import embargo. The European Commission has presented a plan involving the rapid phase-out of Russian fossil fuels rather than an immediate shut-off.<sup>65</sup>

Alongside the economic sanctions decided by various governments, a large number of companies have decided to terminate or heavily reduce their trade with Russia and to shut down operations in the country.

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<sup>59</sup> Society for Worldwide Interbank Financial Telecommunication, SWIFT, is a member-owned company with its registered office in Belgium which aims to provide a worldwide system for the secure electronic transmission of financial information.

<sup>60</sup> The United States and United Kingdom have also prohibited transactions with the Russian Ministry of Finance and the Russian National Wealth Fund.

<sup>61</sup> This list of sanctions is not exhaustive and, in most cases, the sanctions are also directed against Belarus and persons and companies with links to Belarus.

<sup>62</sup> Australia's prohibition covers petroleum products, coal and gas, while the United States has prohibited the import of liquefied natural gas, crude oil and certain other petroleum products. The Canadian government has also introduced an embargo on imports of crude oil from Russia, even though Canada has no such imports.

<sup>63</sup> Two major Russian banks, Sberbank and Gazprombank, have been exempted by the European Union from the sanctions aimed at other banks and financial institutions. Sberbank and Gazprombank mediate a large part of the payments for Europe's imports of fossil fuels from Russia.

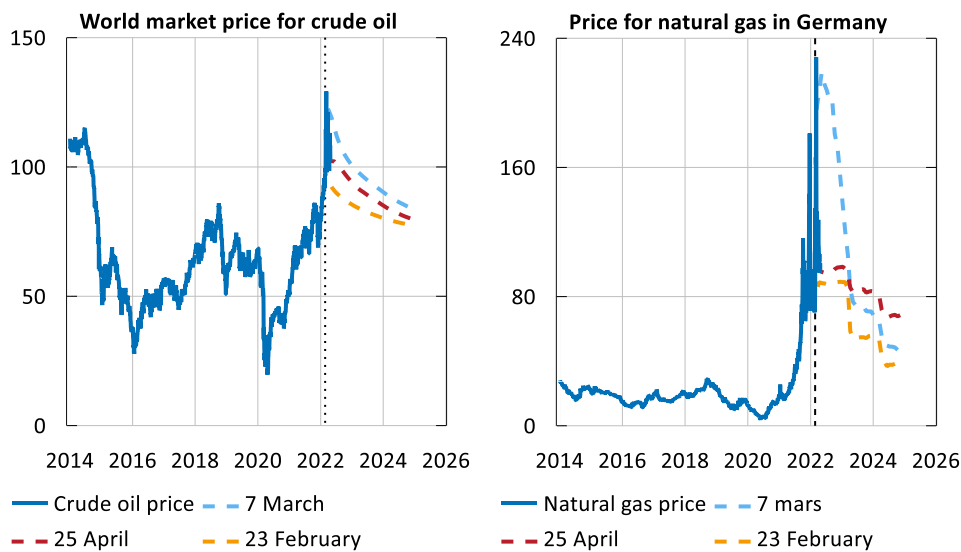
<sup>64</sup> It is difficult to determine the magnitude of the costs that would arise due to an import embargo. Some analyses that have focused on the German economy indicate a fall in Germany's GDP of between 0.5 and 6.5 per cent. See Bachmann et al. (2022), "What if? The economic effects for Germany of a stop of energy imports from Russia", ECONtribute Policy Brief no. 028, Gemeinschaftsdiagnose 1-2022, which has been jointly produced by five German forecasters [https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/ifw-Publications-ifw/Gemeinschaftsdiagnose/Langfassungen/gd\\_2022\\_1.pdf](https://www.ifw-kiel.de/fileadmin/Dateiverwaltung/ifw-Publications-ifw/Gemeinschaftsdiagnose/Langfassungen/gd_2022_1.pdf), and Bundesbank's latest monthly report <https://www.bundesbank.de/en/tasks/topics/war-against-ukraine-energy-embargo-could-significantly-weaken-german-economy-889696>.

<sup>65</sup> The European Commission's plan, called REPowerEU, involves imports of Russian natural gas decreasing by two-thirds this year. To replace this shortfall, the Commission plans to increase imports from other countries, such as Algeria, Norway and the United States, and to speed up the expansion of solar and wind power. See [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_22\\_1511](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511). However, industry analysts say that it may be difficult to increase the supply of energy from renewable sources quickly and that, over the short term, the European Union may be forced to accept the increased use of oil and coal imported from other suppliers than Russia.

## Higher prices for energy and food

In the first days after the outbreak of war, stock market prices fell worldwide and market rates decreased. On the foreign exchange markets, the US dollar and Swiss franc appreciated, at the same time as the Swedish krona and other currencies from small, open economies depreciated. In addition, there were steep rises in prices for fossil fuels (see Figure 53) and electricity.

**Figure 53. World market price for crude oil and price for natural gas in Germany**  
Brent, USD per barrel (left) and euro per MWh (right)



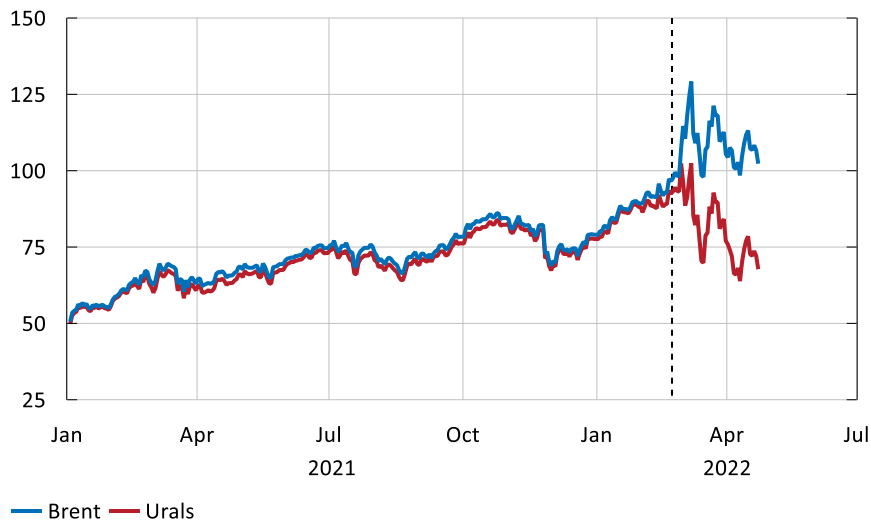
Note. Solid line refers to outcome, broken line refers to forward pricing at the specified date. Broken vertical line marks 23 February 2022, the day before Russia's invasion of Ukraine.

Sources: Intercontinental Exchange and the Riksbank.

Equity prices and market rates rose again fairly soon, however, and the effects of the war on the financial markets are deemed to have been limited, so far. Energy prices remain high, even though they receded after the heavy rises at the start of March, and price movements remain large. The outbreak of the war has created considerable uncertainty over Europe's future energy supply and energy prices are being clearly affected by news of the course of the war and by measures that could affect Russian exports of fossil fuel. Even though the EU sanctions have been designed to make it possible to continue imports of natural gas and oil, there are still business risks linked to continued trade for the companies directly involved. Since the start of the war, the price of Russian oil has fallen, while Brent crude has become more expensive (see Figure 54).

**Figure 54. Price of crude oil, Brent and Ural**

USD per barrel



Note. Brent and Ural refer to two different benchmark prices used in crude oil trading. Brent is currently the world's leading benchmark price for crude oil; the name originally comes from a specific oilfield in the North Sea called Brent. Ural is a benchmark price used for the pricing of Russian crude oil intended for export. Broken line marks 23 February 2022, the day before Russia's invasion of Ukraine.

Source: InterContinental Exchange.

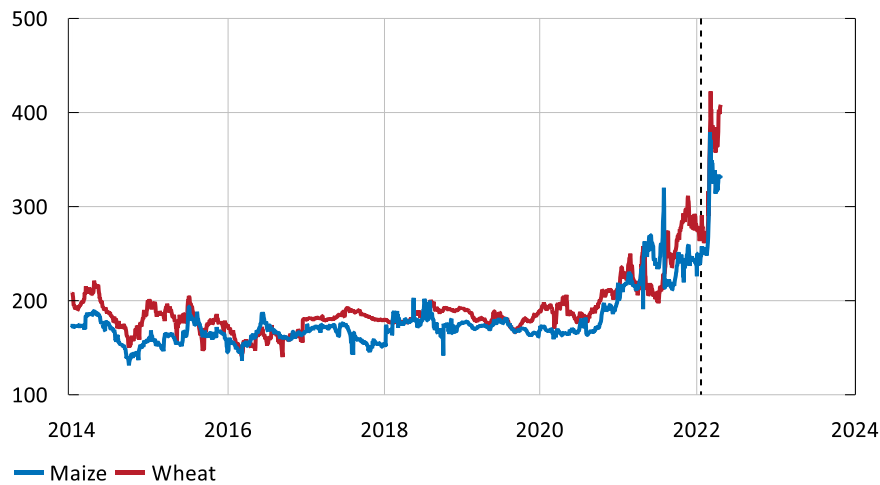
The conflict in Ukraine is also contributing, through several different channels, towards pushing up world market prices for food. As Russia and Ukraine are important exporters of cereals, maize and fertiliser, prices for these products have risen (see Figure 55). In return, higher prices for fertilisers and energy are leading to higher costs for farmers and food producers. In emerging market economies, many households spend a large proportion of their incomes on food and, for them, rising food prices often entail a direct threat of starvation. One country that has been particularly badly impacted by the war in Ukraine is Egypt, which is one of the world's largest importers of wheat.<sup>66</sup>

For households in the EU and Sweden, higher prices for energy and food will lead to lower purchasing power. In March, consumer prices for energy rose by over 40 per cent in the euro area, compared with the level one year previously, and food prices are now also being affected by the conflict. Higher prices for energy and food have also contributed to expectations that several central banks in Europe will take steps to restrain demand and defend their inflation targets.

<sup>66</sup> In addition, Egypt has been a popular destination for Russian and Ukrainian tourists and the war has therefore led to falling incomes. In March, the International Monetary Fund announced that Egypt's government had requested assistance to cope with the crisis.

**Figure 55. Price of maize and wheat**

EUR per tonne



Note. Broken line marks 23 February 2022, the day before Russia's invasion of Ukraine.

Source: Euronext.

### Migration and higher defence expenditure

Public finances in EU Member States are being affected by the war in Ukraine in several ways. In addition to increased transfers to households to compensate for higher energy prices, costs for receiving refugees are also increasing. According to the UN Refugee Agency, UNHCR, around 5 million people have fled Ukraine since the start of the invasion and most of these have travelled to the EU. At the start of March, the Council of the European Union decided to activate the Temporary Protection Directive, which grants Ukrainians fleeing the war the possibility to seek temporary protection within the Union. This decision applies until 4 March 2023 and, among other things, provides Ukrainian refugees with access to essential healthcare and some financial assistance, as well as the right to work.<sup>67</sup> The refugee crisis is increasing public expenditure in the form of transfers to migrants and aid organisations, and is raising public consumption.<sup>68</sup>

One further factor that is affecting public finances is that several countries in the vicinity of Russia are now deciding to rearm. The invasion has forced a reassessment of Europe's security policy situation and earlier choices have rapidly been re-evaluated. At least seven governments in Europe have so far announced increased defence expenditure and there are clear indications in a couple more countries that increases are being considered. Of greatest economic significance is the German government's proposal to allocate EUR 100 billion immediately to a fund for defence procurement

<sup>67</sup> The decision also means that refugees have the right to assistance with housing and that child refugees have the right to go to school. The Temporary Protection Directive can be extended for up to three years. For more information, see [https://ec.europa.eu/home-affairs/policies/migration-and-asylum/common-european-asylum-system/temporary-protection\\_sv](https://ec.europa.eu/home-affairs/policies/migration-and-asylum/common-european-asylum-system/temporary-protection_sv).

<sup>68</sup> The longer the conflict continues and the greater the number of Ukrainians who choose to stay in the EU for a longer period, the greater too will be the effects on the supply of labour in the EU.

and to increase ordinary allocations to defence to over 2 per cent of GDP in the period ahead. In 2019, Germany's defence budget amounted to about 1.3 per cent of GDP.

As yet, it is unclear at what rate and to what extent defence allocations in the European Union will increase and how this rearmament will be funded. However, the details of the German government's proposal indicate a willingness to rely on increased borrowing this year and for a couple of years to come.<sup>69</sup> The Swedish government's objective is for defence spending to increase to 2 per cent as soon as practically possible.<sup>70</sup>

## Two scenarios for economic development

What will the economic consequences be in the slightly longer term? How will the prospects for economic activity and inflation be affected? One key issue, of course, will be the development of the military conflict in Ukraine and, in turn, how this affects economic exchanges between Russia and the countries applying sanctions. As has been mentioned, several governments in the EU advocate immediate joint measures to restrict EU imports of oil and natural gas. Such a decision would further impede growth. An important related issue concerns the re-evaluation of security policy now taking place, which could also have far-reaching economic consequences on a global level. Voices are being raised in Europe and North America for increased self-sufficiency in strategically important sectors and the focus on globalisation and cost efficiency seen in recent decades is being questioned.

The Riksbank's main scenario assumes that the current sanctions against Russia will remain in place over the forecast period and that the EU will not implement a joint, immediate embargo on imports of Russian oil and gas. The main scenario also assumes that the price of oil and other commodities will develop approximately in line with current forward pricing. However, the possibility of developments in the period ahead moving in a completely different direction cannot, of course, be ruled out. To illustrate this uncertainty, descriptions are presented here of two scenarios based on different assumptions on the military conflict and the various choices being discussed.<sup>71</sup> In several respects, the main scenario is compatible with the assumptions in the first of these two scenarios, in which prices for crude oil and other commodities soon subside. At the same time, however, the main scenario assumes that households and companies are affected by the considerably uncertainty currently prevailing, and that their decisions on consumption, saving and investment reflect this.

<sup>69</sup> Historical data on various countries' military expenditure is published by the Stockholm International Peace Research Institute (SIPRI). The proportion of GDP allocated to defence increased in many countries in 2020 as the pandemic had caused significant falls in GDP. See also the blog post "Explainer: The proposed hike in German military spending" by Alexandra Marksteiner at SIPRI (<https://sipri.org/commentary/blog/2022/explainer-proposed-hike-german-military-spending>).

<sup>70</sup> The Swedish budget for 2022 allots SEK 76.6 billion to the expenditure area defence and crisis preparedness. This corresponds to around 1.3 per cent of GDP. The government target of an increase to 2 per cent was announced by Prime Minister Magdalena Andersson at a press conference on 10 March. The Prime Minister also announced that the allocation would be raised as soon as it became possible to convert the increases efficiently into a stronger defence capability.

<sup>71</sup> Both scenarios, like the Riksbank's main scenario, assume that the members of the EU and NATO avoid a military escalation leading to their armed forces becoming combatants in the war.

### **Scenario: Rapid military de-escalation, limited economic effects**

In the first scenario, a decisive de-escalation of the military conflict between Russia and Ukraine takes place in 2022. Either the intensity of fighting decreases across Ukraine as a whole or is geographically restricted so that it continues to affect a smaller part of the country's territory. The number of Ukrainians fleeing the country decreases and a large proportion of those who have already fled make their way back again.

The sanctions against Russia remain in place but most EU countries allow imports of oil and natural gas to continue for another couple of years. During this time, investments are made to reduce dependence gradually on fossil fuels from Russia. To simplify this transition, efforts are made to increase imports from other suppliers and, at the same time, there is an increase in Russian exports of fossil fuel to countries elsewhere in the world, particularly in Asia. Prices for energy and other commodities subsequently decline again, reaching, by the start of next year, approximately the same levels as before the outbreak of war.

Significant rearmament takes place in Europe and some efforts are made to increase the degree of self-sufficiency, for example in energy and food. However, the present global trading system largely remains intact. Growth this year is lower than was expected before the outbreak of the war but, as of next year, the macroeconomic consequences are relatively minor.

In the scenario, inflation rises further this year from the current high levels. Several governments in the EU therefore introduce new measures to mitigate the effects on household purchasing power and to help companies in energy-intensive sectors survive. The extent of these measures varies from country to country and depends both on how much support is needed and on how much further public expenditure the public finances allow.

Monetary policy cannot prevent prices for energy and other commodities from rising faster than other prices and wages. Nevertheless, in the scenario, monetary policy in Europe moves in a tighter direction. One reason for this is the lingering effects of the pandemic, which continue to affect consumer prices. Another reason is that the central banks wish to avoid a situation in which higher energy prices more substantially affect long-term inflation expectations so that these rise clearly above the inflation targets. However, the fact that energy prices eventually subside again makes this task easier. Most central banks in Europe, including the Riksbank, therefore succeed in bringing inflation back to the inflation target with comparatively moderate rate rises.

### **Scenario: Import embargo and greater economic resilience**

In the second scenario, the governments of Europe decide to increase the economic pressure on Russia further and stop, in principle, all imports from the country this year. The background is a continued high level of conflict in Ukraine and increasing numbers of Europeans becoming convinced that new security policy choices are necessary and require economic sacrifices. Imports of gas and oil from other producers,



such as Norway and the United States, increase. Despite this, prices rise to approximately the levels listed on the spot and forward markets in the first week of March (see Figure 53). In Germany and several other countries, natural gas is rationed and many manufacturing companies are periodically forced to reduce or halt production.

In the scenario, the EU and its allies go significantly further in their efforts to reduce their dependence on Russia and a number of other countries deemed unreliable. On both sides of the Atlantic, the authorities take decisions aimed at increasing economic resilience and self-sufficiency. Among other things, they attempt to encourage companies in strategically important sectors to move production and supply chains closer to their own territory or to friendly countries.

The high energy prices and rationing lead to a recession in the euro area and to US GDP growth also being lower. In 2024, a gradual recovery takes place, but productivity growth is slowed down due to changes in global trading patterns. A greater focus on security and self-sufficiency leads to less focus on cost efficiency and it becomes more difficult for companies to take advantage of economies of scale. All of this leads to higher costs which, in turn, risk further pushing up the rate of price increase.

In this scenario, many sectors and households are badly impacted by rapidly rising costs and disruptions in production due to rationing. Households' real incomes thus become significantly lower than in the first scenario. However, the worsened economic development is partly due to conscious choices, in which security and resilience are prioritised ahead of increased purchasing power. In the European countries with relatively strong public finances, the authorities implement comprehensive support measures and these mitigate the economic problems, at least in the short term. However, several governments in the EU find that their scope for manoeuvre is limited by high public debt and they are consequently forced to make some difficult trade-offs. In these countries, the crisis worsens further due to increased economic uncertainty and decreased confidence.

As inflation is rising sharply, monetary policy in Europe must be aimed primarily at defending the inflation targets. Several central banks face difficult decisions as growth is slowing down at the same time and uncertainty over underlying inflationary pressures therefore increases. For the ECB, the situation becomes even more complicated as energy prices in different euro area countries are being affected to different degrees by the import embargo on Russian oil and gas and because the fiscal room for manoeuvre varies significantly among Member States. The rapid rate of price increase means that the monetary policy tightening in most European countries becomes significantly more stringent in this scenario compared with the scenario with a rapid military de-escalation.

Sweden imports a comparatively small amount of fossil fuel from Russia and also has strong public finances. In the scenario, these factors help slightly dampen the direct effects of the sanctions on price formation and economic activity. Even so, Swedish energy prices depend on the world market price of oil and on electricity prices in neighbouring countries. In addition, Sweden's economy is heavily dependent on economic developments abroad and, in the scenario, Swedish monetary policy is also

faced by a situation with rapid price rises and slowing growth. However, this lower growth is largely due to lower productivity, which tends to push up the rate of price growth.

Secondary effects of the higher energy prices are strong and, in the scenario, long-term inflation expectations rise substantially. There is, therefore, a risk that a large number of companies and households will start to plan for inflation to persistently become higher than 2 per cent and thereby take economic decisions that are not compatible with the inflation target. To defend the target, the Riksbank is forced to hike the policy rate at a relatively rapid rate. Tighter monetary policy contributes towards restraining resource utilisation and cost pressures and to inflation eventually being returned to 2 per cent.

## Higher inflation and restrained growth in the main scenario

The Riksbank's main scenario is largely compatible with the first of the two scenarios discussed above. The war and sanctions contribute to growth in Europe becoming lower and the rate of price increases becoming higher than forecast in the Monetary Policy Report from February. For households, higher prices for energy, food and other expenses lead to slower growth in real incomes, which is expected to lead to lower consumption. Higher energy prices also mean higher costs for companies, putting pressure on their profitability. Reduced profitability and increased uncertainty restrain investment, at least in the short term. Taken together, the Riksbank expects that growth in Europe will be restrained fairly clearly this year due to the war and sanctions against Russia. The forecast for GDP growth in the euro area in 2022 has been reduced by about one percentage point compared with the forecast from February. The Swedish economy is also being affected by the war, which is one of the reasons that Swedish GDP is now expected to grow more slowly. The downturn is being counteracted by increased public expenditure for migration and by measures aimed at protecting households and companies from higher costs.