Swedish Fiscal Policy

The Swedish Fiscal Policy Council's report
2023

The Swedish Fiscal Policy Council is a government agency whose remit is to conduct an independent evaluation of the Government's fiscal policy. The Council fulfils its tasks primarily through the publication of the report Swedish Fiscal Policy, which is presented to the Government once a year. This report has to be capable of being used by the Riksdag (Swedish Parliament) as a basis for its evaluation of the Government's policy The Council also publishes special studies of specific parts of fiscal policy as well as background reports that the Council has ordered from independent experts, who are responsible for the content of their reports.

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Foreword

The remit of the Swedish Fiscal Policy Council is to follow up and analyse fiscal policy. The Council is also to work for more public discussion in society about economic policy. The Council has to submit a report to the Government by 15 May each year, and this is the Council's sixteenth annual report. Analytical work for the report was completed on 24 April 2023.

The Council consists of six members. Since the previous report Lina Aldén's and Pär Österholm's appointments have expired. Jesper Roine and Anna Seim are new members as of 1 July 2022.

The Council is assisted by a Secretariat consisting of Göran Hjelm (Head of Secretariat and agency head), Niklas Frank, Mikael Hemlin, Charlotte Sandberg Gavatin and Markus Sigonius.

We have been given valuable presentations by Nils-Henrik von der Fehr, Johan Holm, Pär Holmberg, Anders Kofoed-Wiuff and Markus Wråke. In addition, we have had rewarding discussions with Thomas Tangerås and with staff of the Swedish Energy Markets Inspectorate, the National Institute of Economic Research (NIER), the Government Offices of Sweden and Svenska kraftnät (the Swedish National Grid). Staff of the Government Offices have fact-checked the text.

Stockholm, 10 May 2023

Lars Heikensten
Chair

Lisa Laun
Vice Chair

Annette Alstadsæter

Mats Dillén

Jesper Roine

Anna Seim

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The Fiscal Policy Council's remit

According to its instructions from the Government,[1] the Fiscal Policy Council has to follow up and assess the achievement of the fiscal and economic policy objectives proposed by the Government and adopted by the Riksdag and, by doing so, to contribute to greater transparency and clarity concerning the aims and effectiveness of economic policy.

On the basis of the Spring Fiscal Policy Bill and the Budget Bill, the Council has to assess whether fiscal policy is consistent with long-term sustainable public finances and the budgetary policy targets, in particular the surplus target and the expenditure ceiling, but also the debt anchor and, when required, the local government balanced budget requirement.

The Council also has to assess the stance of fiscal policy in relation to the development of the economy. If the Council concludes, when assessing fiscal policy, that there is a clear deviation from the surplus target, the Council is to assess the reasons given by the Government for the deviation and to consider and give an account of the rate at which there should be a return to the target.

The Council is also to evaluate the Government's forecasts for the development of the economy and the Government's report to the Riksdag on public finances and the costs of proposed reforms.

The Council may also assess whether fiscal policy is in line with what is required for good, long-term sustainable growth and whether the policy leads to long-term sustainable high employment; examine the clarity of the Spring Fiscal Policy Bill and the Budget Bill, particularly with respect to the stated basis for economic policy and the reasons for measures proposed; and analyse the effects of fiscal policy on the distribution of welfare in the short and long term.

The Council is also to work to stimulate more public debate on economic policy.

[1] Government Ordinance 2011:446.

The fiscal framework

The fiscal framework contains the fundamental principles that fiscal policy has to follow in order to be sustainable in the long-term.[2] Some of these principles are regulated by law; others follow from established practice. The budgetary policy targets – i.e. the surplus target, the debt anchor, the expenditure ceiling and the balanced budget requirement for municipalities and regions – make up the central parts of the fiscal framework along with a stringent budget process in both the Government and the Riksdag, and external monitoring and transparency.

The Riksdag has adopted a surplus target for general government net lending. Since 2019 the target is 0.33 per cent of GDP on average over the business cycle. When there is judged to be a deviation from the surplus target, the Government has to give an account of how a return will be made to the target. The plan for the return has to be timed and normally start in the following year, and the pace of the return to the target has to take account of the economic situation.

According to the Swedish Budget Act, the Government must propose an expenditure ceiling in the Budget Bill for the third budget year ahead. The ceiling is set by the Riksdag. The established practice is to also have a budgeting margin of a certain size under the expenditure ceiling. This is primarily intended to act as a buffer if expenditure does not develop as estimated.

The expenditure ceiling is the overarching restriction on the budgetary process. The budgetary process sets priorities between different expenditures, and expenditure increases are examined on the basis of a predetermined total economic space that follows from the expenditure ceiling and the surplus target. In principle, expenditure increases in one expenditure area must be covered by proposals for expenditure reductions in the same area.

As a complement to the surplus target, a debt anchor was introduced as of 2019 for general government consolidated gross debt (the Maastricht debt). The debt anchor is not an operational target, but is a benchmark for the desired level of debt in the medium term, and the level is set by the Riksdag at 35 percent of GDP.

[2] This summary is based on Govt Comm. 2017/18:207, the Framework Communication.

Since 2000 a balanced budget requirement has been applied to the local government sector; it stipulates that each municipality and region has to budget for net income in balance. If, however, there are exceptional reasons, a local government can budget for temporary deficits.

The surplus target and the debt anchor have to be stable over long periods of time, but it must, at the same time, be possible to review them, e.g. in the light of new assessments of demographic trends or the development of debt. To avoid the targets being changed in a way that reduces their credibility, changes should be implemented in a predictable manner and with the broadest possible political support. The target levels should therefore be reviewed every eight years, at the end of every other electoral term.

Summary

The political and economic situation has changed rapidly and dramatically several times in recent years. The global pandemic was followed by a strong recovery driven by expansionary policy and pent-up consumption. High demand, in combination with bottlenecks in production and transport, led to rapidly rising inflation. Russia's war of aggression on Ukraine brought further dramatic price increases, especially for energy, and induced great general uncertainty about global developments. As a result, monetary policy was realigned rapidly, leading to large interest rate increases for households and businesses.

The combination of high inflation and falling demand is challenging for fiscal policy. Expansionary measures to alleviate the sharp decline in households' purchasing power need to be balanced carefully against the objective of preventing high inflation from taking hold.

This year's report is divided into six chapters, the first four of which deal with economic developments and fiscal policy in the past year. In Chapter 1 we draw a picture of macroeconomic developments internationally and in Sweden. In Chapter 2 we analyse whether fiscal policy is consistent with the fiscal framework and the budgetary targets. In Chapter 3 we extend this analysis and discuss whether fiscal policy, including electricity support, was an appropriate stabilisation policy in light of the prevailing forecasts when the budget was presented in the autumn. In Chapter 4 we describe the development of the electricity market and assess the scale and design of the electricity support schemes. In Chapter 5 we analyse how fiscal policy has been conducted over the business cycle in the past two decades. We conclude with a chapter in which we discuss some issues that are relevant to the future of the fiscal framework, and which ought to be considered in the coming framework review.

Chapter 1 – The state of the macro economy

The Russian invasion of Ukraine in the spring of 2022 meant a dramatic deterioration of the security situation and has led to major economic stresses in the past year. The prices of fuel, agricultural products and certain input goods have risen sharply.

The rapidly rising inflation last year contributed, along with the elevated uncertainty and the rapid interest rate increases by central

banks, to a considerable slowdown in economic growth in the second half of 2022. In 2023 growth is expected to be weak in both the US and Europe. Several factors, such as the security situation in Europe and the risk of an international financial crisis, underscore that the situation could deteriorate further.

In Sweden both the Government and the National Institute of Economic Research (NIER) make the assessment that growth will be negative this year and that the recession will continue next year. Thus far the labour market has withstood the decline in economic activity, but unemployment is expected to increase slightly both this year and the next. In late March the social partners in industry reached a two-year agreement involving wage increases of 4.1 per cent this year and 3.3 per cent next year. Since then several other sectors have reached similar agreements. This upward shift in wage growth, along with for instance electricity support and the price indexation of certain transfer systems and tax scales, mitigates the decline in households' purchasing power. These factors do not, however, fully offset the high inflation; households' real disposable incomes are expected to fall in both 2022 and 2023. The rapid rise in interest rates has also led to price declines for homes and other assets. As such, household finances have worsened due to both lower real incomes and reductions in asset values.

To sum up, the Swedish economy is in an uncertain situation characterised by high inflation and low growth. This poses difficult questions to economic policy. At the same time, some bright spots have been seen in early 2023; inflation is falling abroad and the social partners have reached a two-year agreement that we assess is consistent in the long-term with the inflation target.

Chapter 2 – The fiscal framework

The public finances remain very strong, despite the challenges faced by fiscal policy in recent years. Even if the recession may result in budget deficits both this year and the next, public debt remains low, both from a historical perspective and in relation to most comparable countries.

The Council's assessment is that the fiscal policy in the Budget Bill for 2023 and the Economic Spring Bill of 2023 was in line with the fiscal framework. The recession could, taken alone, justify a more expansionary policy. However, the framework provides scope for

taking account of inflation and monetary policy challenges, as the Government has done. Chapter 3 discusses whether fiscal policy was appropriately designed to handle the present economic situation.

There are several unclarities in the Budget Bill that make it difficult to assess the Government's reasoning. There is no clear explanation of how the Government arrives at its assessment of the fiscal impulse. Furthermore, which is more serious, the Government has changed the method for calculating potential GDP. This change, which has major effects on the structural balance, is made without offering any rationale or discussion of its consequences. Clarity is a cornerstone of the framework, and this lack of transparency surrounding the most central variable for assessing fiscal policy's alignment with the surplus target is remarkable.

The budget process has returned to normal after some turbulent years during the pandemic. Nevertheless, the Council is still concerned about the budget process looking ahead. There was a rapid erosion of established practice during some of the preceding years, and the recent improvement is likely explained by the current parliamentary situation.

When the new Government took office, the expenditure ceilings were raised, which is in line with established practice. The ceilings were also raised at the government transitions in 2006 and 2014. As a share of GDP, the expenditure ceiling is largely unchanged in the coming three years, with a marginal decrease for 2026 being announced in the Economic Spring Bill of 2023. The expenditure ceiling as a share of GDP is an important economic variable. However, the expenditure levels proposed have not been motivated extensively. More attention ought to be given to how the Government views the development of public expenditure in the medium-term.

Chapter 3 – Fiscal policy in times of high inflation and falling demand

The Government was confronted with a complicated stabilisation policy situation in the autumn of 2022; high inflation was expected to coincide with an approaching recession. In such a situation, fiscal policy cannot be decided solely on the basis of its effect on the business cycle. It is essential to also take account of inflation to avoid counteracting monetary policy. In this context, consideration needs to be given to the household sector's high indebtedness, a large portion of which is adjustable-rate loans. This makes the assessment uncertain; monetary policy can quickly have a stronger than desirable effect, with

negative consequences for financial stability. In the autumn the social partners had also recently started negotiations on a new agreement against a backdrop of high inflation and falling purchasing power.

The fiscal policy in the Budget Bill for 2023 must be described as cautious. Absent the high inflation there would have been grounds for a more expansionary policy. The Council considers the scale of fiscal policy – including capacity charges and electricity support – to be reasonable given the risks of persistently higher inflation and a sustained period of high interest rates, with undesirable economic effects via the housing market. The same largely applies to the Economic Spring Bill. However, it would probably have been possible to pursue a slightly more expansionary fiscal policy without it causing any great problems for monetary policy. The relatively tight fiscal policy means that the Government may introduce additional measures in the future if the recession continues and the inflationary pressure moderates.

As regards the content of fiscal policy, there is cause to be more critical. The dramatic deterioration of households' purchasing power justifies that some support was introduced. That it was mainly given in the form of electricity support can in part be explained by the regulations in place. However, support for electricity consumption is difficult to reconcile with the ambition of lowering electricity use when supply is limited and shortages risk occurring.

The Council considers that the electricity support schemes were too extensive. With more limited electricity support, there would have been scope, without creating problems for monetary policy, for more targeted measures to particularly vulnerable households. The Economic Spring Bill's temporary measures targeted at families with children receiving housing allowance and vocational education are examples of such measures. In a situation of high inflationary pressure, there should also be a focus on measures that improve the economy's growth potential. Measures of this kind are largely absent in the 2023 Budget Bill.

Chapter 4 – Electricity support for households and businesses

There are strong reasons to not compensate for price changes in various markets. Price is the mechanism that makes supply and demand meet; if the State provides compensation for increases in the price of electricity, it decreases the incentives for households and

businesses to be economical in their use of electricity and invest in energy-efficiency measures. This means that the risk of price peaks and electricity shortages remains, even in the longer term. State compensation for higher prices on a market may also create a political dynamic involving interventions in more markets where prices rise.

In light of the major price increases on electricity and the uncertainty concerning how high the prices would become in the winter of 2022–23, as well as the EU regime that governs how the capacity charges may be used, it was reasonable to introduce some electricity support. However, the Council's view is that the electricity support schemes became too extensive, that their design was inadequate in certain ways and that repeated support schemes generate incentive problems.

The support schemes for households ought to have been limited by e.g. a consumption-based ceiling above which no support would be given. The Council is particularly critical to the third electricity support scheme announced in January 2023. This support scheme provides compensation for electricity costs in November–December 2022. For households in electricity areas 3 and 4, this period was already covered in the second support scheme, which was announced in August 2022. When the Government presented the third support scheme at the beginning of January, it was also clear that prices in November–December 2022 became lower than feared in the autumn. It is therefore difficult to understand how the need for electricity support can have been deemed higher in January 2023 than when the second electricity support scheme was announced.

The Council is also critical to the announced scale of electricity support to businesses. Businesses have to a large extent been able to pass on their higher electricity costs to consumers, and businesses that consume a lot of electricity tend to have fixed electricity contracts at comparatively low prices. Any support to businesses ought, as far as possible, to be targeted to those that have had higher electricity costs. Above a certain consumption ceiling, it should be required that businesses demonstrate their costs, combined with a maximum amount per business.

Finally, the Council is critical to the handling of the electricity support schemes. Many features of the measures are inherently political. The Government also has greater capacity than agencies to process proposals. The Government ought to have taken on a more

active role to influence the size and design of the support schemes, and ought also to have taken full responsibility for the policy. Moreover, information about the support schemes and their recipients must be available for scrutiny. Policies must be transparent and possible to evaluate, and there has to be accountability.

Chapter 5 – Fiscal policy over the business cycle: 2002–2022

In recent years there has been increasing discussion, both internationally and in Sweden of the role of fiscal policy in macroeconomic stabilisation. In addition to the limitations of monetary policy, experiences from both the pandemic and Russia's invasion of Ukraine have shown that, from time to time, fiscal policy needs to take on an active role. At the same time, the experiences from the 1970s and 1980s are still relevant; several drawbacks of active fiscal policy remain pertinent.

The Council makes an annual evaluation of how fiscal policy corresponds with the business cycle. These evaluations focus on a single year and are normally made in the year after the decisions were taken. These annual evaluations can be supplemented by a systematic analysis on a longer time period. An analysis of this kind is presented in Chapter 5.

Our analysis indicates that, on average, active fiscal policy has been countercyclical 2002–2022. This applies both to the intentions of fiscal policy, as expressed in Budget Bills, and to the fiscal policy outcomes as measured retrospectively. According to our analysis, the number of times when fiscal policy was clearly procyclical are few, as regards both intentions and outcomes.

This result is consistent with the view that the stabilisation policy frameworks, with rules for fiscal policy and an independent central bank, have worked well. The fiscal framework was developed in light of historical problems and prescribes not only that fiscal policy be conducted countercyclically, but also that the scale of policies should be fitted to the magnitude of the fluctuations in the economy. This appears to have worked.

Altogether, the results indicate that fiscal policy's prospects of stabilising the economy are better than their reputation. Whether this continues to apply in the future will depend ultimately on political decisions; but if the main components of the fiscal framework remain in place and are respected, there are grounds for cautious optimism.

Chapter 6 – The frames for fiscal policy

Finally, we analyse some issues of importance for the future fiscal framework. The next review of the framework needs to begin in around a year's time in order to be completed by 2027 when the next framework period begins.

The principle of intergenerational equity – that welfare commitments and tax levels should be equal across generations – suggests that the surplus target and debt anchor may need to vary over time. A demographic hump that means relatively few people of working age may for instance justify a lower surplus target and a higher debt anchor. In contrast, permanently higher ambitions – irrespective of whether they concern elderly care or defence – should be fully funded and do not justify changes in target levels.

In addition to demographic trends, it is important that the next review assesses whether there will be an investment hump during the next framework period. As we pointed out in last year's report, more knowledge is needed on climate investments requiring full or partial public funding. Moreover, Sweden's defence ambitions have increased. We cannot assess the scale of the required defence investments, but any investment humps need to be analysed. In addition, central and local government investment requirements need to be taken into account, including the infrastructure plan to be published in 2026, i.e. the year before the start of the next framework period.

The next review also needs to regard that, as in the decade before the pandemic, advanced economies may be characterised by so called secular stagnation. This is a situation of relatively weak growth and low inflation despite very low interest rates. In such a situation, monetary policy may again resort to extreme measures such as a negative policy rates or extensive asset purchases to maintain full employment and target inflation. A lower surplus target to increase the public sector's contribution to demand – so called functional finance – could be an alternative such monetary policy. Research related to the US economy indicates that functional finance can be effective, but an analysis is still needed of the extent to which these results are applicable to a small, open economy like Sweden. The coming review should investigate whether the Swedish economy risks returning to secular stagnation and whether, if that happens, a lower surplus target is preferable to more extreme monetary policy measures.

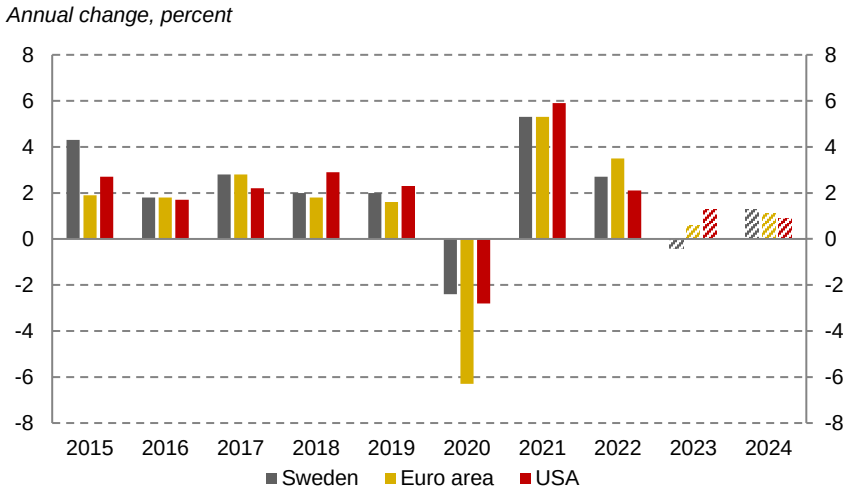
1 The state of the macro economy

The economic situation has changed rapidly and dramatically in recent years. The pandemic broke a long period of stable economic recovery after the euro crisis. However, the economy turned rapidly upwards again, supported by a vigorous expansionary policy. As a result of strong demand and bottlenecks on the supply side, inflation began to increase. Then Russia began its war of aggression on Ukraine, leading to further inflation, rising interest rates, recession and enormous human suffering. Economic policy is now faced with major challenges, as growth declines while inflation remains high. In this introductory chapter we give a picture of the state of the macro economy. We begin by giving a general description of international developments. Then we take a closer look at the situation in Sweden. The chapter end with a brief discussion of how this picture is related to the other chapters in the report.

1.1 Development of the global economy

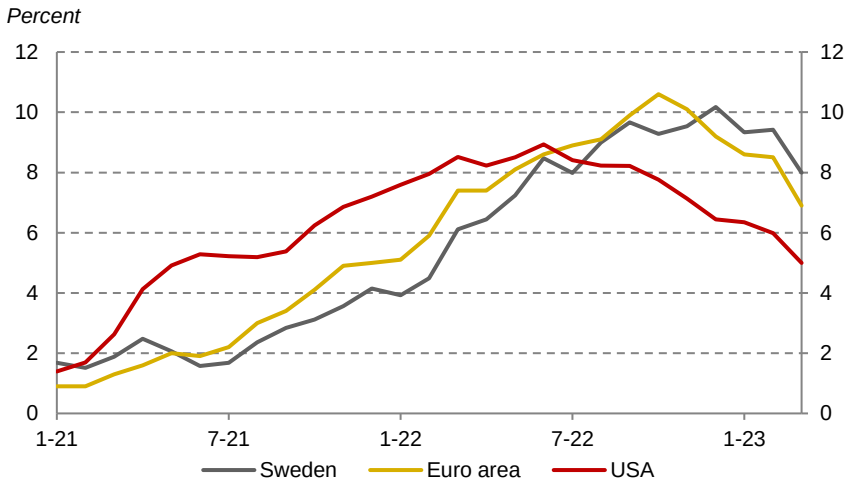
Economic developments in the past year have been strongly affected by Russia's invasion of Ukraine. Russian gas exports to Europe have decreased and energy prices have risen sharply. In combination with supply disturbances in the food sector, continued pandemic closures in China and high demand in the western world, this has driven up inflation and interest rates in the global economy. The rise in prices and interest rates has reduced households' purchasing power and led to weaker demand and declining growth in many countries in the past six months. However, advanced economies showed relatively normal levels of GDP growth for the whole of 2022, mainly due to their strong performance at the start of the year (figure 1.1). Growth in 2023 is forecast to be considerably lower, especially as the higher interest rates have their full effect. Several factors, such as the security policy situation in Europe, developments in the US and Swiss banking sectors and the risk of an international financial crisis, underscore that international developments may become weaker than expected.

Figure 1.1 Global GDP growth



Note: Constant prices. The dashed line bars refer to forecasts.
Source: Source: National Institute of Economic Research (2023).

Figure 1.2 Inflation



Note: CPIF for Sweden, HICP for the euro area and CPI for the US; annual rate of price change based on monthly data. Data up to and including March 2023.
Sources: National statistical authorities via Macrobond.

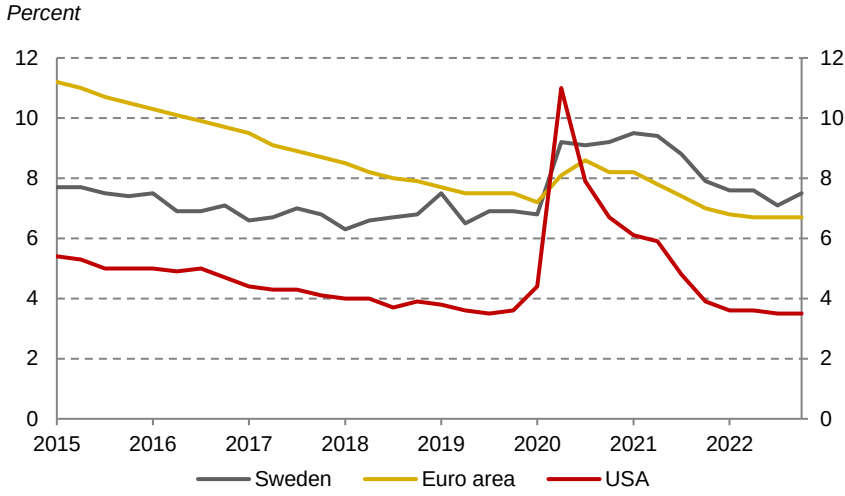
The high inflation has hit the whole of the industrialised world. In 2022 the general level of prices rose by as much as 7.7 per cent in Sweden,

8.4 per cent in the euro area and 8.0 per cent in the US (figure 1.2). High inflation and weak GDP growth, is forecast for many advanced economies in 2023.[1] The rate of price increases has, however, halted or slowed down in recent months and is expected, according to most official assessments, to return to levels around 2 per cent in 2024. Despite incorrect assessments of inflation in 2022, the forecast reflects inflation expectations in the longer term, which have been relatively close to 2 per cent throughout the ongoing inflation episode.[2]

Since inflation started to rise in the US in mid 2021, there has been a discussion about the underlying causes of this development. Several prominent economists already pointed out in February 2021 that the US administration's support package of just over 10 per cent of GDP was of a disproportionate size in relation to the amount of free resources in the economy.[3] During the pandemic, moreover, households had increased their savings considerably, creating a pent-up need for consumption, at the same time as monetary policy remained very expansionary. This meant that there was a great risk that the economy would be overheated by the fiscal stimulus measures, a prediction that turned out to be correct. In the US high demand thus seems to have been an important driver behind the rise in inflation, and unemployment in the country has fallen to low levels (figure 1.3).[4] The demand situation has also contributed to the development of inflation in the euro area and Sweden, even if its role is not as clear (we return to this question below). In Sweden unemployment is still higher than before the pandemic, and clearly higher than in the euro area and the US (figure 1.3). It is, however, likely that the comparatively high unemployment in Sweden is due, to some extent, to its high labour force participation. In Sweden, persons with difficulty finding jobs appear to stay in the labour force to a relatively large extent. The share of the working-age population in work is around 80 per cent in Sweden, compared with just over 70 per cent on average in the EU.[5]

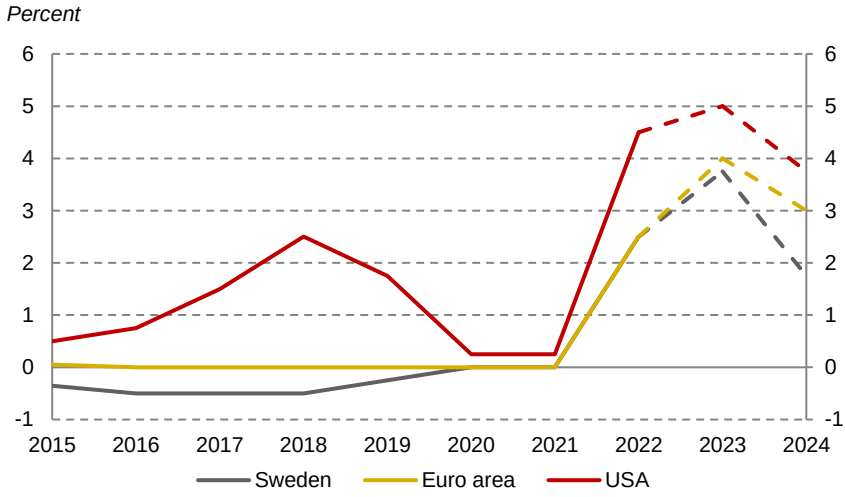
[1] IMF (2023a).
[2] Riksbank (2023).
[3] For example, Blanchard (2021) and Summers (2021).
[4] Shapiro (2022) and Furman (2022).
[5] The 20–64 age group (Eurostat). In the US the employment rate is just over 60 per cent. However, the American definition differs from the European one since the range for working age is broader (Bureau of Labour Statistics). The figures are therefore not fully comparable.

Figure 1.3 Unemployment



Note: All ages, seasonally adjusted.
Source: EU LFS via Macrobond.

Figure 1.4 Policy rates



Note: Policy rate at the end of the year. Dashed lines refer to forecasts.
Source: NIER (2023).

To regain control of inflation, central banks in the industrialised world have rapidly tightened monetary policy. This tightening has mainly taken place via higher policy rates (figure 1.4), but, in some cases, also

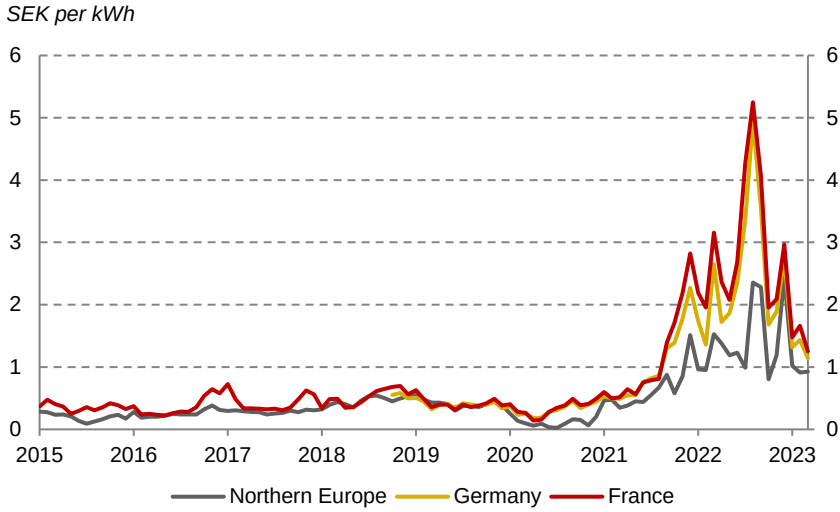
by reducing holdings of financial assets. It is usually assumed to take between one and two years for policy rate changes to reach their full effect. It is therefore likely that monetary policy will continue to slow the growth of demand for some time to come.

The tighter monetary policy has contributed to reducing inflationary pressure. The impact of the policy may, however, have varied between countries depending on what drivers were most important for price growth. In addition to relatively high demand, there were already a number of supply-side factors in 2021 that were pushing up inflation. Some examples are the shortage of semiconductors, bottlenecks in the transport sector and China's repeated lockdowns.[6] Moreover, the supply component of inflation increased dramatically in conjunction with Russia's invasion of Ukraine, primarily because exports of grain, oil and gas from Ukraine and Russia decreased sharply.[7] These supply disturbances have made a particular contribution to the high inflation in Europe. When the invasion began, several European countries, not least Germany and Italy, were wholly dependent on Russian gas for their energy supply. The problem was made worse by reduced production of hydropower and operational disturbances in nuclear power (section 4.1). Since Europe is an integrated electricity market, electricity prices also rose to historically high levels in the Nordic region and Sweden (figure 1.5).

The relative importance of different factors can be illustrated by dividing inflation up into different components. As is seen in figure 1.6, the importance of the supply component for inflation in Sweden increased very strongly after Russia invaded Ukraine in the first half of 2022.[8] In the US, supply factors have also been important. However, the increase in the size of the supply component between 2021 and 2022 was less dramatic in the US, and demand played a greater and more consistent role in 2021.

[6] NIER (2023a).
[7] However, energy exports from Russia already began to decrease at the end of 2021.
[8] The supply component is intended to capture factors that affect price growth at the producer stage, e.g. a reduced supply of transport services or important input goods.

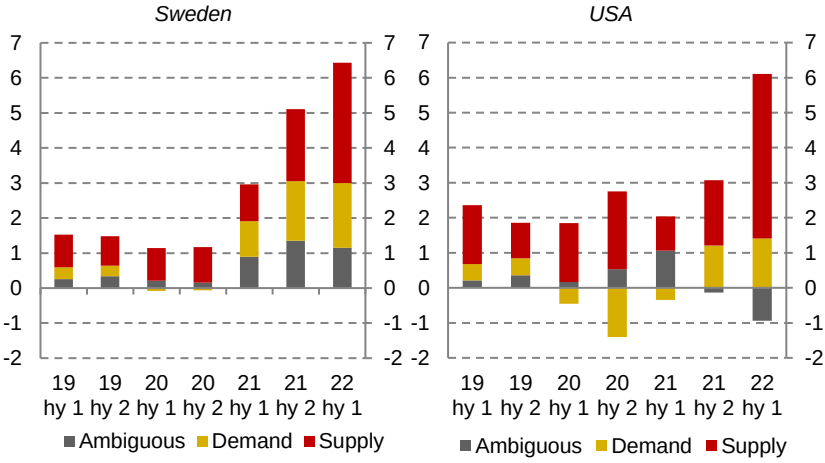
Figure 1.5 Electricity prices



Note: Monthly average. Refers to spot prices on the power exchange, i.e. before any tax etc. Germany and France are shown instead of the euro area due to a lack of aggregated data.
Sources: Nordpool and EEX via Macrobond.

Figure 1.6 Decomposition of total inflation, Sweden and United States

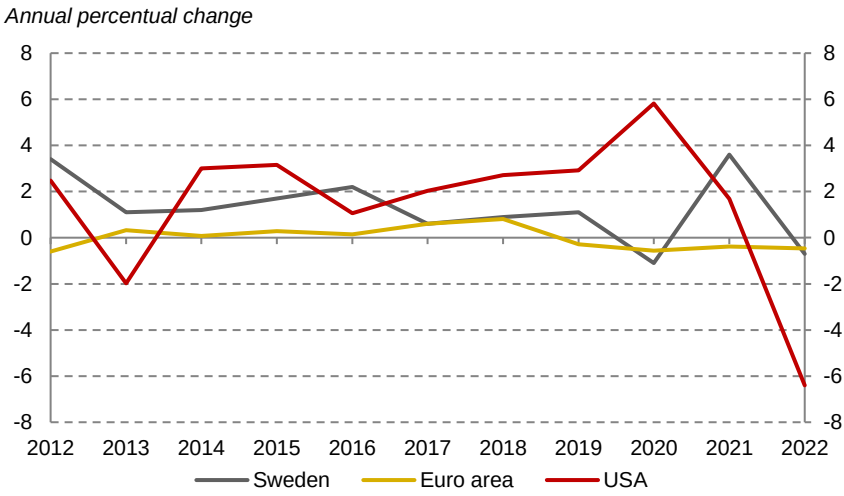
Percent



Note: Half-year data until and including the first half of 2022. Decomposition according to the method of Shapiro (2022). The basis for the decomposition is that demand-driven inflation is characterised by price and quantity moving in the same direction, while supply-driven inflation means that prices and quantities move in different directions.
Source: OECD (2022) recalculated from quarterly to half-year frequency.

Inflation is not reflected fully in wage growth, which contributed to real disposable income per inhabitant in the US, the euro area and Sweden decreasing in 2022 (figure 1.7). The decrease was largest by far in the US, where households' purchasing power fell by 6.4 per cent. In Sweden and the euro area the corresponding figures were 0.7 and 0.5 per cent respectively. The main reason why the fall was much larger in the US than in Europe, even though inflation was similar, is that the US paid cash support for the pandemic in 2021 but not in 2022.[9] Another explanation may be that many countries in Europe paid electricity support to households and businesses in 2022 but not in 2021.[10]

Figure 1.7 Real disposable income per inhabitant



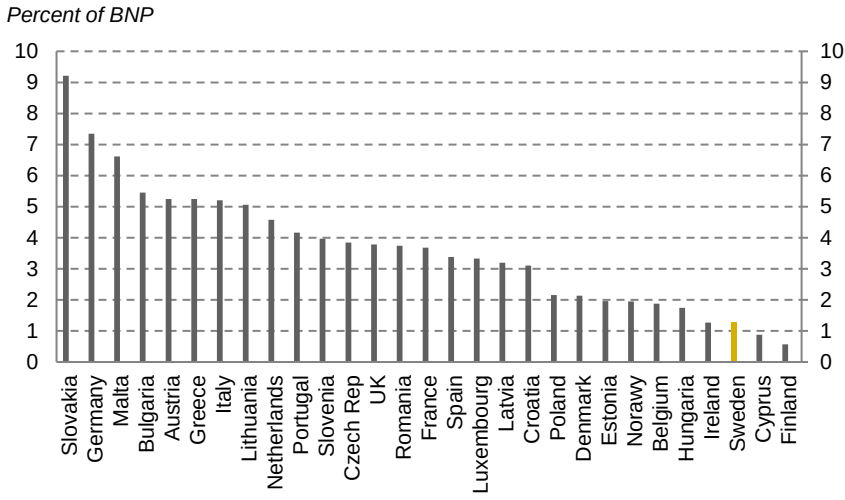
Note: Change in households' real income after taxes and transfers. There may be differences in definitions between countries.
Sources: NIER (2023a), Eurostat via Macrobond and FRED.

Figure 1.8 shows the scale of the energy support schemes in relation to GDP in various European countries. As is seen, the total support in Sweden has been comparatively small. This can probably be

[9] The phase-out of the cash support schemes and certain pandemic reinforcements of unemployment benefit between 2021 and 2022 correspond to 3–4 per cent of the disposable incomes of US households (Bureau of Economic Analysis, 2023).
[10] In Sweden, electricity support to households has mainly been paid out in 2023. However, Statistics Sweden has booked SEK 26 billion of these payments on 2022, which means that a large part of households' electricity support is included in the numbers in figure 1.7.

explained to some extent by the fact that Swedish electricity prices, even though they have been historically high, have been much lower than in many other European countries (figure 1.5). For instance, the electricity price in Germany, which uses large volumes of gas, was on average 500 per cent higher in 2022 than in 2019. In the Nordic region, which uses much less gas, the corresponding figure was about 250 per cent.

Figure 1.8 Scale of the energy support schemes



Note: GDP for 2021. The figures include all temporary energy support schemes adopted or announced between September 2021 and January 2023 and not solely support linked to the price of electricity.
Sources: Bruegel (2023) and Eurostat.

In some countries the extensive electricity support schemes have resulted in a large increase in public expenditure. However, the impact of the support measures on public finances has been limited by the fact that, parallel to this, several countries have taxed the excessive profits made by energy and electricity companies in order to finance the measures.[11] In Sweden they have mainly been financed via the Swedish National Grid's 'congestion rents', which are off the central

[11] In Sweden, unlike in many other European countries, a large part of the revenue from the high electricity prices has accrued to a state enterprise (the Swedish National Grid, SNG) in the form of congestion rents instead of to private electricity companies. See section 4.1 for more information.

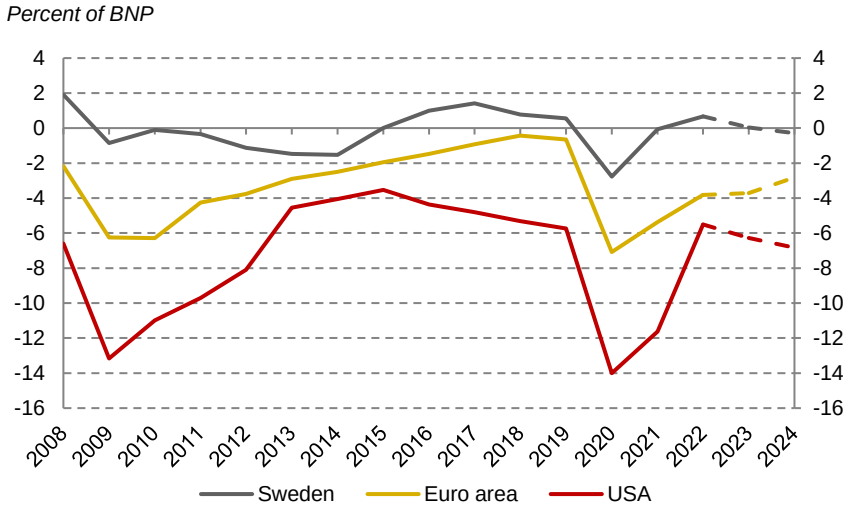
government budget.[12] Therefore, most of the Swedish electricity support schemes do not impact on general government net lending.[13] In 2022 net lending was 0.7 per cent of GDP in Sweden, and it is expected to be around zero in the coming years (figure 1.9). The euro area and the US had substantial deficits in 2022, and the IMF recently made the assessment in its spring forecast that this will remain so in the coming years.

Despite the budget deficits in the US and the euro area, their general government debt decreased as a share of GDP in 2022 (figure 1.10). The main reason for the fall in these debt ratios is that price growth has driven up nominal GDP, which is the denominator in the debt ratio.[14] The debt ratio has also fallen for Sweden, and at the end of 2022 it was approaching the lower interval limit for the debt anchor of 30 per cent of GDP.

Private debt looks different. In Sweden it is at a much higher level than in the euro area and the US, and is among the highest in the world (figure 1.10). The debt situation in the private sector, combined with the fact that most Swedish households have variable interest rates on their loans,[15] means that sensitivity to interest rates is comparatively high in Sweden.[16] Taken together, this means that smaller policy rate increases are required to achieve a desirable tightening than if these debts had been lower and a larger share had been fixed interest loans. The combination of high debt and variable interest rates complicates monetary policy decisions and is a risk to financial stability, and ultimately to the development of the whole macro economy.[17]

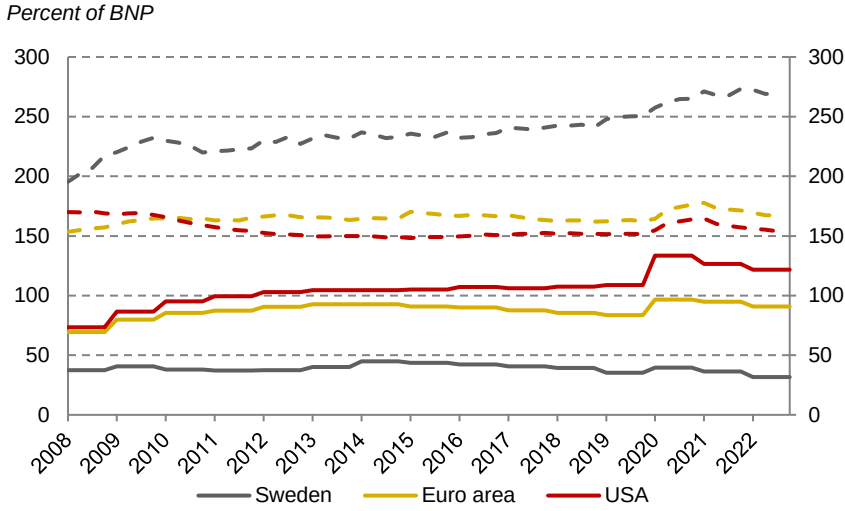
[12] The SNG's congestion rents are similar to arbitrage income and arise when the electricity price is lower where the electricity is produced than where it is consumed. These rents affect the central government borrowing requirement but are not recognised under an income heading or appropriation in the budget. For more information, see chapter 2 and chapter 4.
[13] In the National Accounts the electricity support from the SNG is recorded first as a tax to central government and then as a transfer from central government to households and businesses. The effect on net lending is therefore neutral, see in-depth box 2.1.
[14] In Sweden's case a further reason is the Riksbank's continued transition to a self-financed foreign exchange reserve, which means that public debt is moved from the Swedish National Debt Office to the Riksbank (whose debt is not included in the Maastricht debt). This transition was carried out between February 2021 and December 2022, and has involved a transfer of more than 3 per cent of GDP in public debt,
[15] According to Statistics Sweden, just over 70 percent of households' loans have an interest rate refixing period of one year or less.
[16] Riksbanken (2022a).
[17] ibid.

Figure 1.9 General government net lending



Note: Broken lines refer to forecasts.
Source: IMF via Macrobond.

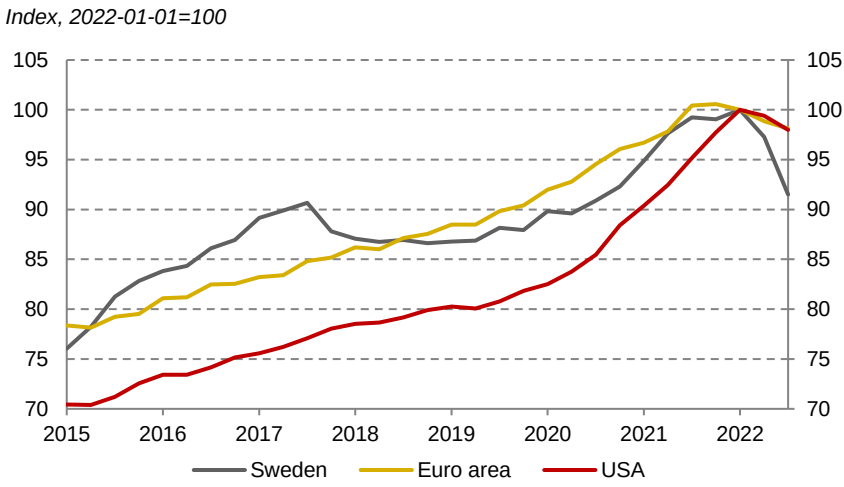
Figure 1.10 Debt, private and general government



Note: The unbroken lines are general government debt, the broken lines are private debt. The Maastricht debt and total debt in the non-financial private sector (covers both households and businesses).
Sources: IMF and BIS via Macrobond.

A substantial part of the private debt both in Sweden and in the euro area and the US is home loans.[18] In years with low interest rates, home loans have been cheap, which has increased demand for housing and driven up prices. In the past year, when interest rates have risen, home loans have instead become more expensive, resulting in lower residential real estate prices (figure 1.11). In Sweden prices had fallen by almost 10 per cent at the end of the third quarter of 2022 and by around 15 per cent at the end of the year.[19] This means a severe deterioration of the financial position of homeowners and contributes to the weakening of household finances in the past year.

Figure 1.11 House prices



Note: Refers to all residential property units adjusted for inflation. Data until and including the third quarter of 2022.
Source: BIS via Macrobond.

To sum up, the global economy is in a very precarious situation. Low growth and high inflation are predicted to characterise international economic developments in 2023. In 2024 most analysts expect a recovery as inflation falls and interest rate increases cease. There is, however, great uncertainty about both how high interest rates need to be and how long they need to be kept up to stem inflation. The

[18] In Sweden home loans amount to around 90 per cent of GDP (Finansinspektionen, 2022).
[19] Valueguard via Macrobond.

troubled situation in the world and in financial markets also means that there is a risk of new shocks and shifts in the economic situation.

1.2 Developments in Sweden

The mood in the Swedish economy was good at the start of 2022, largely due to the rapid recovery from the pandemic. During the course of the year the situation became much bleaker in conjunction with Russia's invasion of Ukraine and when prices and interest rates began to rise, and at the end of the year quarterly GDP growth was negative. However, growth for the full year 2022 was positive and totalled 2.6 per cent, which is mainly explained by carry-over effects from the strong close to 2021.[20]

Table 1.1 Macroeconomic key indicators

Government, 17 april 2023	2021	2022	2023	2024
GDP	5,4	2,6	-1,0	1,2
GDP gap[2]	0,3	1,3	-1,3	-1,9
Employment	0,9	2,7	0,2	-0,2
Hours worked	2,3	2,4	0,4	-0,6
Unemployment	8,8	7,5	7,9	8,3
CPIF[1]	2,4	7,7	5,9	2,2
Net lending	0,0	0,7	-0,4	-0,6
Structural balance	-0,1	0,0	0,0	0,6
Maastricht debt[4]	36,5	33,0	31,0	31,0
NIER, 29 mars 2023	**2021**	**2022**	**2023**	**2024**
GDP	5,3	2,6	-0,6	1,3
GDP gap	0,7	1,0	-1,5	-2,2
Employment	0,9	2,7	0,4	-0,2
Hours worked	2,3	2,4	0,8	0,2
Unemployment	8,8	7,5	7,9	8,2
CPIF	2,4	7,7	6,1	1,7
Net lending	0,0	0,6	-0,1	-1,0
Structural balance	-1,0	0,0	1,1	0,4

[20] GDP growth during the course of 2022 was relatively weak. Average quarterly growth was around zero according to the NIER. However, the last quarter of 2021, when growth was as high as 2.1 per cent, plays a considerable role in the calculation of growth for the full year 2022. The high growth at the end of 2021 means that the GDP level at the start of 2022 was significantly higher than at the start of 2021. As a result, the growth calculated for the full year 2022 is relatively high, 2.6 per cent, despite weak quarterly growth during the year. This effect is called a carry-over.

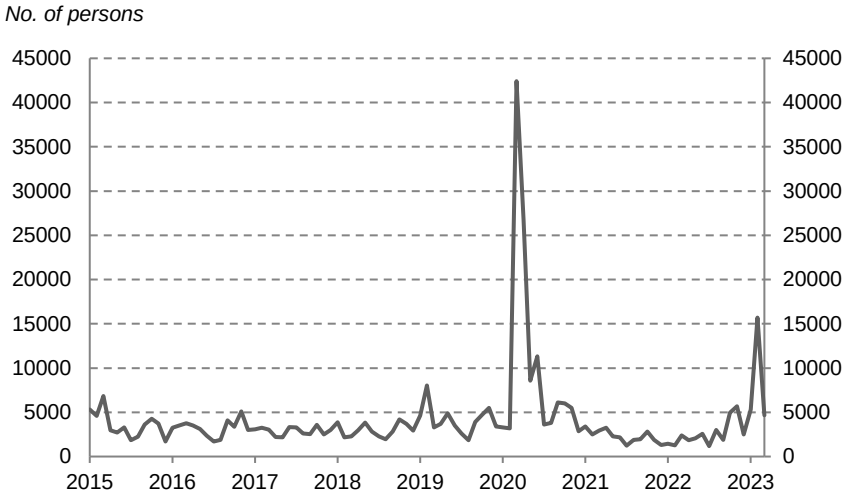
Maastricht debt	36,3	32,5	31,2	32,2

Note: [1] Annual percentage change. [2] Per cent of potential GDP. [3] Per cent of the labour force. [4] Per cent of GDP. Applies to both forecasts.
Sources: 2023 Spring Fiscal Policy Bill and National Institute of Economic Research (2023a).

Both the Government's and the NIER's forecasts point to continued high inflation and low growth in 2023 (see table 1.1). Towards the end of the year, and especially in 2024, inflation is expected to fall and growth to become positive again. However, the assessment is that the recession will continue next year, one result being slightly higher unemployment.

The weak development of the economy in recent quarters is clearly seen in assessments of resource utilisation. The GDP gap, which is an estimate of the difference between actual and potential GDP, falls to a negative level in 2023 and is expected to stay below zero up until 2026. So far, however, the labour market has been relatively little affected by the economic downturn. Although unemployment did increase by a few tenths of a percentage point between December 2022 and February 2023, unemployment actually decreased viewed over the full year 2022, while the employment rate increased and the number of hours worked rose.

Figure 1.12 Number of lay-offs per month

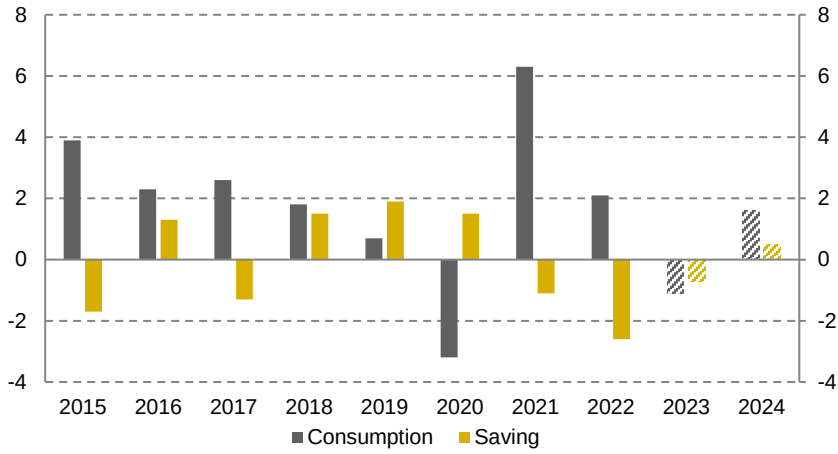


Note: Monthly data until and including March 2023. Out of the 15 000 lay-offs in February 2023, around 11 000 came from Humana Assistans, which lost its permit to conduct its business.
Source: Arbetsförmedlingen *[Swedish Public Employment Service]* via Macrobond.

Moreover, lay-off figures have been low (figure 1.12) and productivity in the economy has shown weak growth,[21] which suggests that so far businesses have chosen, to a great extent, to retain their workforce despite weaker demand. The high lay-off figures in February 2023 are due largely (around 11 000 out of 15 000) to the fact that the care provider company Humana Assistans lost its permit and issued lay-off notices for all its employees.[22] So the increase in February cannot be interpreted as a cyclical effect. However, unemployment will rise slightly both this year and next year in the assessment of the Government and the NIER.

Figure 1.13 Change in households' consumption and savings

Percentual change and change in percentage points



Note: Grey bars show the percentage change in households' consumption expenditure in constant prices. Yellow bars show the change in the share of savings in households' disposable income. Household savings are defined as disposable income plus net savings in occupational pensions less households' consumption expenditure. Dashed bars refer to forecasts.
Source: National Institute of Economic Research (2023a).

In the full year 2022 household consumption increased by 2.1 per cent, but, as with GDP, a very strong close to 2021 contributed to the relatively strong annual figure (figure 1.13).[23] Consumption decreased

[21] According to the calculations of the NIER (2023a), the productivity gap (productivity compared with potential productivity) falls more than the labour market gap (the number of hours worked compared with the potential number of hours worked) in 2023. In 2024, however, the labour market gap falls even more while the productivity gap gets less negative.
[22] Dagens industri (2023).
[23] See Footnote: 21.

in the second half of the year and in the last quarter of the year it was just over 2 per cent lower than at the end of 2021 in constant prices.[24] Households' scope for consumption was squeezed by reduced margins due to rising electricity prices and interest rates, but was maintained by many households reducing their savings. Savings fell by 2.6 per cent of disposable income in 2022 and reached 13.3 per cent at the end of the year, which is the lowest level since 2017. In 2023 and 2024 the NIER expects households' savings to continue to be relatively low. Consumption is expected to decrease in 2023, and to then recover in 2024.

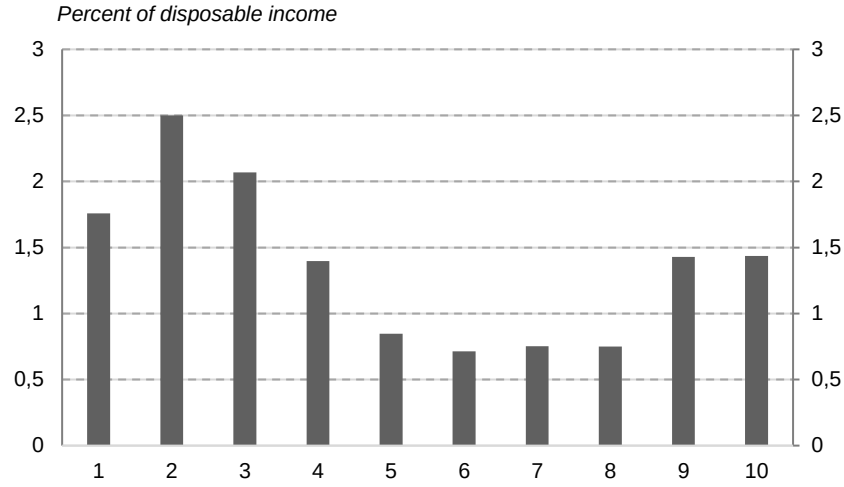
The nominal increase in disposable income in 2022 was lower than inflation, with the result that real disposable income per inhabitant weakened by 0.7 per cent (figure 1.7). As noted in the previous section, the deterioration is, however, relatively small in relation to inflation, which may be due to rising labour income and the fact that various discretionary measures taken by the Government have softened the fall.[25] In 2023, however, real disposable income per inhabitant is expected to fall further by several percentage points. The fall will be cushioned slightly by the outcome of the wage negotiations at the end of March, when the social partners signed up to an agreed rate of wage increases of 4.1 per cent in 2023 and 3.3 per cent in 2024. This is a higher agreed rate of wage increases than in the last decade, but one that we judge to be consistent with the inflation target in the long term.[26]

The income decrease in 2023 was also cushioned because some taxes and transfers are indexed[27] and because the high inflation from 2022 impacted on tax and welfare systems as of January this year. Figure 1.14 shows how much the rules of public tax and transfer systems affect nominal disposable income in different income groups (deciles) in 2023 compared with a scenario with inflation of 2 per cent in 2022. It is clear to see that low and high-income earners get stronger

[24] Seasonally adjusted, Statistics Sweden via Macrobond.
[25] Hourly wages rose by 2.7 per cent in nominal terms in 2022 (National Institute of Economic Research, 2023a). Examples of discretionary measures that counter the decrease in real income are the electricity support schemes and the increase in the guarantee pension in August 2022.
[26] The outcome of the negotiations can be compared with the NIER's hourly wage forecast that was published just before the agreement was concluded. For 2023 and 2024 it forecast a wage increase rate of 3.6 per cent and 3.4 per cent respectively along with a CPIF forecast of just under 2 per cent for 2024 and 2025 (NIER, 2023a).
[27] Around half of the benefits in the social insurance system are linked to the price base amount (Swedish Social Insurance Agency *[Försäkringskassan]*, 2023).

inflation protection from public systems than middle income earners. In the lower income brackets this is mainly due to price-indexed transfers such as guarantee pension, sickness benefit and sickness compensation. Above the eighth decile the main explanation is that the threshold for national income tax is raised with inflation and was therefore increased in 2023.

Figure 1.14 Inflation protection in the tax and transfer systems for different income groups



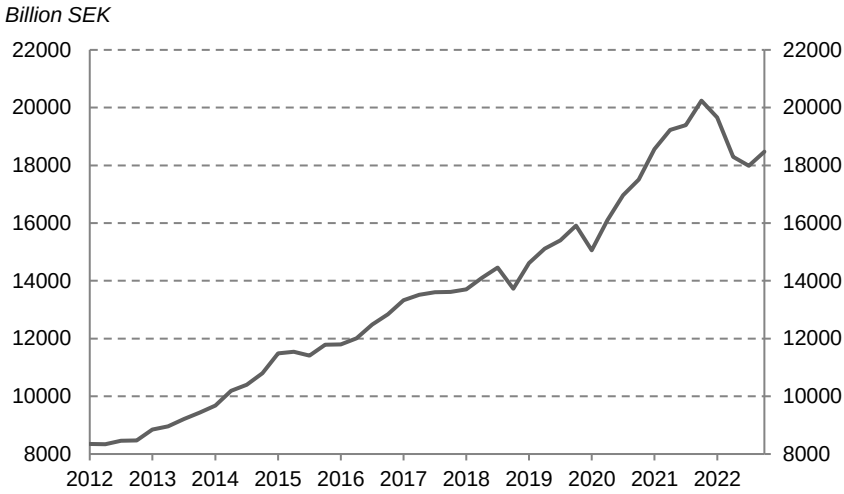
Note: The figure shows the percentage effect of tax and transfer regulations on nominal disposable income in 2023 compared with if inflation had been 2 per cent. Those with the lowest incomes are in decile 1 and those with the highest in decile 10.
Source: Own calculations using the FASIT microsimulation model.

Households' purchasing power has also been affected by the Riksbank's policy rate increases. According to an estimate from autumn 2022, households' interest expenditure doubles, on average, from 3 per cent to 6 per cent of disposable income up until 2025.[28] The effect of interest rate changes on households' cash flow, and thereby on their consumption, is one of the most important channels for the operation of monetary policy. So the effect of the interest rate increases on households' disposable income is intended.

[28] Riksbank (2022b). The policy rate has, however, risen more rapidly than expected by the Riksbank when its analysis was conducted in September 2022.

As mentioned in the previous section, interest rate increases and the erosion of households' disposable income has had a strong impact on the prices of housing and other assets. House prices in Sweden fell by more than 15 per cent in 2022. At the same time, stock exchanges around the world are at much lower levels than at the end of 2021. This development led to households' aggregate financial assets decreasing by around 10 per cent in nominal terms in 2022 (figure 1.15). Households' finances have thus deteriorated through both falling incomes and lower asset values.

Figure 1.15 Households' financial assets



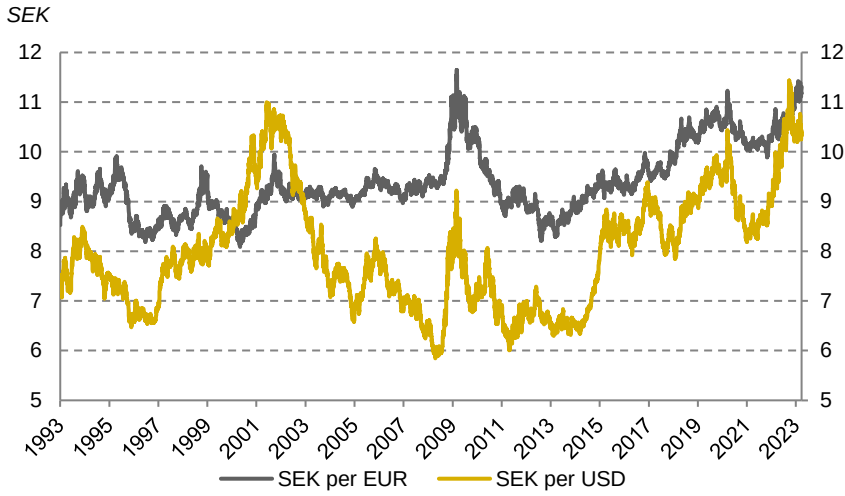
Note: Quarterly data, the last observation is the fourth quarter of 2022.
Source: Statistics Sweden via Macrobond.

Households' finances have also been affected by the fact that the Swedish krona has lost value in relation to global currencies such as the euro and the US dollar. The weakening of the SEK exchange rate appears to be an expression of a trend that has been in place since at least 2015, after the Riksbank set its policy rate at a negative level for the first time and began to buy government bonds (figure 1.16). Then the weakening of the exchange rate was a deliberate monetary policy strategy intended to make import goods more expensive and raise inflation to the target. At present the falling exchange rate is, on the contrary, problematic since inflation is far too high. Major weakening of the exchange rate can have substantial effects on households'

prosperity, not only by raising domestic inflation, but also by increasing the costs of international travel and purchases from abroad.

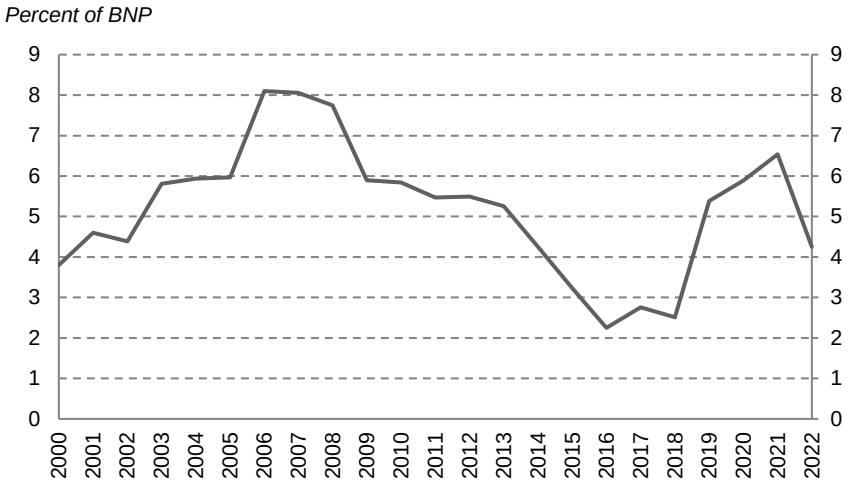
The current account surplus fell in 2022 after having strengthened before then since 2016 (figure 1.17). What happened last year was due both to a deterioration of the terms of trade and to a decrease, in real terms, in net exports despite the weaker exchange rate. For several decades Sweden has had a current account surplus. This means that Swedish businesses and households have accumulated large financial claims on other countries.

Figure 1.16 The Swedish krona's exchange rate



Note: From 4 January 1993 to 30 March 2023.
Source: Riksbank via Macrobond.

Figure 1.17 Sweden's current account balance



Note: The current account balance is the difference between what is produced and what is consumed in the country.
Source: Statistics Sweden via Macrobond.

To sum up, the Swedish economy is in an uncertain situation characterised by high inflation and low growth. GDP growth was relatively weak during the course of 2022, but so far the business sector seems to have been cautious about reducing its labour force. The weak growth of demand in the second half of 2022 is one important reason why the labour market is now showing signs of weakening. The overall assessment is that the Swedish economy is in a recession that will continue next year, resulting in rising unemployment.

Russia's war of aggression on Ukraine is of great importance for economic developments looking ahead, especially in Europe. Most assessments assume low demand in 2023 at the same time as supply disturbances subside, leading to rapidly declining inflation and an end to interest rate increases. The stability of the market's longer-term inflation expectations, in combination with the outcome of the round of wage negotiations, point in that direction. However, there is still concern that a return to the inflation target will not happen as forecast, that the security policy situation will deteriorate and that there will be further instability in financial markets. These dark clouds entail a clear risk of a weaker than expected economic development in the coming years.

1.3 The chapters in this year's report

Several dramatic shifts in economic policy have been required to respond to the upheaval resulting from events in recent years. The international discussion has moved from stressing the permanence of low interest rates and the need for an expansionary fiscal policy during and after the pandemic to focusing instead on combating inflation through rising interest rates and a resultant need for fiscal restraint. In this year's report we take a broad approach to fiscal policy by analysing both current issues and long-term trends that fiscal policy will need to take into account in the future.

In *Chapter 2* we address the core of the Council's remit by analysing whether the fiscal policy in the 2023 Budget Bill and the 2023 Economic Spring Bill are consistent with the fiscal framework.

In *Chapter 3* we analyse fiscal policy from a stabilisation policy perspective and discuss, in particular, the role of fiscal policy when growth is weak and inflation high. Our analysis largely starts from the situation when the 2023 Budget Bill was presented, and its purpose is to evaluate whether the policy planned, including the electricity support schemes, was appropriate to the economic situation. Since the 2023 Budget Bill has been supplemented with action in the Spring Fiscal Policy Bill, we also comment how policy stands in relation to the present situation.

In *Chapter 4* we evaluate the electricity support schemes, by far the largest economic policy measure in the past year. We discuss the size and design of these schemes and the distribution of responsibilities between the Government and the agencies concerned. We highlight what could have been done differently and what lessons can be learned for the future.

In *Chapter 5* we take a step back and look at fiscal policy over the past two decades. We analyse how fiscal policy has been conducted over the business cycle, considering both how it was designed in Budget Bills and when it is measured retrospectively.

In *Chapter 6* we conclude this report by discussing fiscal policy from a longer forward-looking perspective. The purpose is to contribute to a discussion on what is an appropriate fiscal framework, a question that will soon be topical when work ahead of the next framework review needs to start. We discuss matters including the need for investments and the implications for fiscal policy if the macro

economy is characterised by 'secular stagnation' after the ongoing inflation episode.

2 The fiscal framework

This chapter discusses whether the fiscal policy in the 2023 Budget Bill and the 2023 Spring Fiscal Policy Bill was in line with the fiscal framework, focusing on the budgetary policy objectives: the surplus target, the expenditure ceiling, the debt anchor and the balanced budget requirement for municipalities and regions. In Chapter 3 we deepen the discussion of what is an appropriate fiscal policy in times of high inflation and declining demand with a focus on the Government's policy, including the electricity support schemes.

2.1 Unclear points concerning fiscal policy in the 2023 Budget Bill

The economic prospects in the 2023 Budget Bill were bleak. GDP growth, which had been strong in both 2021 and 2022 during the recovery from the pandemic, was expected to be negative in 2023 and both private and public consumption were estimated to decrease in real terms. The negative GDP growth means that the GDP gap deteriorated sharply between 2022 and 2023 and was estimated to fall from 0.2 per cent in 2022 to -1.7 per cent in 2023, i.e. a decrease of 1.9 percentage points. Thus 2023 was judged to be a year of recession.

The general government structural balance, which shows what general government net lending would be in a normal economic situation, is usually used to assess the adaptation of fiscal policy to the economic situation. When the economy is facing a recession judged to be substantial, the Government should normally try to conduct an expansionary fiscal policy to soften the downturn. This means that the structural balance is below the level of the surplus target.[29] The structural balance was estimated in the 2023 Budget Bill as 0.4 per cent of potential GDP for 2022 and at 0.7 per cent for 2023 (figure 2.1). In both years the balance was therefore slightly higher than the surplus target's level for net lending of 0.33 per cent of GDP and it rose by 0.3 percentage points between 2022 and 2023. Both the level of the balance in 2023 and the change between 2022 and 2023 thereby point to a slightly contractionary fiscal policy.

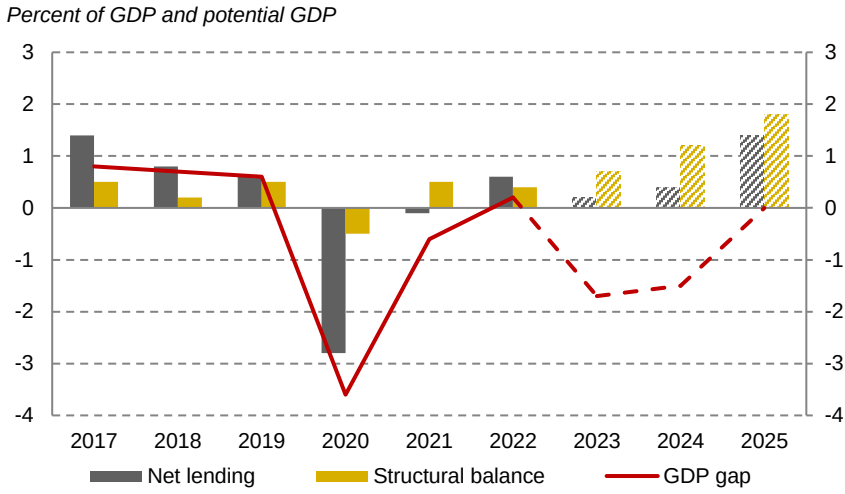
[29] See section 5.1 for an outline description of fiscal policy over the business cycle and terms in fiscal policy. See also the glossary at the end of the report.

In the 2023 Budget Bill the Government made the assessment that there was no deviation from the surplus target. According to the Framework Communication there is a deviation from the surplus target if the structural balance deviates clearly from the target level of 0.33 per cent of potential GDP for the present year or the next year, i.e. budget year 2023. The framework does not specify what a "clear deviation" means, but the Council usually uses the term when the structural balance deviates from the target level by at least 0.5 per cent of potential GDP. In the 2023 Budget Bill the deviation was less than that. The structural balance in 2023 was estimated at 0.7 per cent of potential GDP and thereby exceeded the target level by 0.4 percentage points. So the structural balance did not deviate clearly from the target level, but it did deviate upwards, contrary to what is normal in a recession. Moreover, the balance increased slightly between 2022 and 2023 despite a rapid deterioration of the economic situation, which also goes against established stabilisation policy.

One explicit purpose of the fiscal framework is that stronger public finances will enable an active fiscal policy in recessions, especially when the GDP gap, as in 2023, is less than -1.5 per cent.[30] Normally a structural balance that was clearly lower than the target level would have been more consistent with the framework than a structural balance, as in the 2023 Budget Bill, above the target level. However, the Framework Communication also states that fiscal policy needs to "ensure" that the effects on demand are not greater than monetary possible can "handle".[31] The government is clear that it is the high inflation that is the cause of the relatively restrained fiscal policy in the weak economic situation. In an overall assessment, the Council considers that the structural balance is in line with the framework and that inflation justifies a higher balance than would have been desirable if inflation had been low. Whether fiscal policy, including the electricity support schemes, is appropriate from a cyclical perspective is discussed further in the next chapter.

[30] The Framework Communication defines a "normal economic situation" as being when the GDP gap is in the interval ±1.5 per cent of potential GDP, Govt Comm. 2017/18:207, p. 15.
[31] Govt Comm. 2017/18:207, p. 15.

Figure 2.1 General government saving and GDP gap



Note: Broken bars and lines refer to forecasts.
Source: 2023 Budget Bill

As indicated, the structural balance has a prominent place in the framework when fiscal policy is evaluated in relation to the surplus target. The structural balance is also used as an indicator of how fiscal policy influences demand in the economy. It is influenced by many factors and the metric may sometimes need to be adjusted for extraordinary circumstances in order to be better able to analyse what effect fiscal policy has on demand. There are several special factors to take into account this year. The Government discusses some of them and argues that departures from the structural balance are reasonable when the direction of fiscal policy is discussed. However, the departures have been presented in an unclear way and with little explanation.

For changes in the structural balance to be a useful metric of the direction of stabilisation policy, it must reflect, in a reasonable way, how economic policy influences the growth of demand in the economy. When the 2023 Budget Bill was presented, the congestion rents and electricity support were classified as part of the private sector in the National Accounts (NA). Therefore, neither revenue from the congestion rents nor expenditure for electricity support were included

in the general government balance.[32] The measures presented in the 2023 Budget Bill totalled SEK 40 billion,[33] but that amount thus did not include the electricity support even though it is to be regarded, in economic terms, as a fiscal policy measure. In the 2023 Budget Bill the electricity support schemes to households and businesses were estimated at around SEK 60 billion[34], i.e. considerably more than all the other measures together. The fact that the congestion rents and electricity support go via a state enterprise thus means that a significant part of fiscal policy fell outside both the established metrics for the direction of fiscal policy and the normal budgetary process.

The Government took some account of this by writing in the 2023 Budget Bill that if the electricity support is included, the direction of fiscal policy changes from being weakly contractionary to being neutral. It is difficult to understand how the Government arrived at that conclusion. The electricity support schemes mentioned in the 2023 Budget Bill thus totalled around SEK 60 billion; when the Government adds these support schemes, then, with their metrics, this ought reasonably to mean that the budget goes from being weakly contractionary to being expansionary, not neutral. Furthermore, there was no description or explanation in the Bill of when or how much the electricity support was judged to affect the economy, and it was therefore difficult to follow the Government's reasoning as to how fiscal policy influences the development of the economy. Moreover, excess congestion rents need to be weighed into the economic assessment. Only taking account of the electricity support schemes means a partial analysis; as set out in in-depth box 2.1 below the reclassification of the National Accounts in February 2023 also means that both the congestion rents and the electricity support have to be included in net lending.

[32] The electricity support of SEK 9 billion paid in spring 2022 was not designed in the same way. It was paid from the budget and was included in the balance like other expenditure. The support to electricity-intensive companies, estimated at SEK 2.4 billion was on the expenditure side of the budget for 2023 even though the 2023 Budget Bill was unclear about whether it would be financed by congestion rents.

[33] 2023 Budget Bill, Budget Statement pp. 12–13, table 1.1.

[34] This refers to the electricity support schemes based on consumption in October 2021–September 2022. Chapter 4 describes all electricity support schemes announced and paid out in 2022 and 2023.

In-depth box 2.1 Change in the reporting of congestion rents and electricity support

On 8 February 2023, i.e. after the 2023 Budget Bill, Statistics Sweden announced a change in the reporting of the excess congestion rents and the electricity support schemes in the National Accounts (NA). The congestion rents not used for electricity support are reported, as previously, as part of the private sector and do not affect the public finances. However, the electricity support schemes and the excess congestion rents, which finance these schemes, are classified as being in the public sector. In accounting terms, the rents used for electricity support are transferred from SVK to the State in conjunction with decisions to grant support. The electricity support schemes and the excess congestion rents therefore cancel out one another so that net lending is not affected. Therefore the possible effects of the electricity support schemes and congestion rents on the economy are not captured by net lending or the structural balance and do not affect the normal metrics for the direction of fiscal policy.

The National Accounts report the electricity support to households (SEK 17 billion) in 2022, while the subsequent support to households (SEK 10 billion) and the support to businesses (SEK 29 billion) are reported in 2023. The revenue that finances the support schemes is handled as a book transfer from SVK to the State at the same time as the support is paid, and is classified as a tax.

However, the effects on demand depend on when the congestion rents were paid and when the electricity support was announced and paid out, and not when it is booked. Payments in the first electricity support scheme were made in spring 2022, and the scheme had no link to congestion rents and was, instead, financed on the budget. The congestion rents that finance the subsequent electricity support schemes were largely paid in 2022. The second electricity support scheme was announced in autumn 2022 and payments were made in February 2023. The third electricity support scheme was announced in January 2023 and payments are expected to be made in the spring. Payments from the electricity support scheme for businesses are also expected to be made in 2023.[35] In an overall assessment, the

[35] The support to businesses is, however, judged to have a limited effect on demand, see Chapter 3.

contractionary effect of the congestion rents probably dominated in 2022, while the expansionary effect of the electricity support schemes dominates in 2023. Viewed over the two years, however, the effect on demand is neutral.[36] This analysis of effects on demand stands even if the National Accounts had chosen to book the congestion rents and the electricity support schemes associated with them in the same year.

In addition to the electricity support schemes, there is another temporary factor that should be taken into account. The surpluses from state-owned enterprises delivered to the central government treasury in 2022 were unusually large, especially from Vattenfall. These temporarily high surpluses amounted to 0.3 per cent of GDP and were chiefly generated from revenue from sales in Germany and compensation for the premature closure of German nuclear power. These surpluses contributed to strengthening the structural balance in 2022 without there being any corresponding lower demand in the Swedish economy. Accordingly, there are grounds for disregarding these temporary revenues in the calculation of the structural balance and not taking them into account when assessing the direction of policy. This means that it is more appropriate this time to analyse the change in the primary structural balance when analysing the direction of fiscal policy, i.e. excluding changes in net capital, which includes the above mentioned dividends.

The 2023 Budget Bill reports that fiscal policy has a weakly contractionary impulse with a structural balance that is strengthened from 0.4 to 0.7 per cent of potential GDP between 2022 and 2023. But, as stated above, these calculations do not take account of congestion rents, electricity support or the temporarily high dividend revenue. If these factors are included, the structural balance would be higher in 2022 and lower in 2023 than reported in the 2023 Budget Bill, and the balance would decrease considerably between 2022 and 2023, from 1.1 to -0.3 per cent of potential GDP.

In table 2.1 we give a simplified presentation of how the congestion rents, the electricity support and the extra dividends from Vattenfall could be taken into account in the assessments of the direction of fiscal policy in the 2023 Budget Bill. If the congestion rents had been a tax and the electricity support an expenditure from the budget, the balance would, in principle, have been affected as shown in the table. Then the

[36] See section 3.3.

structural balance in 2023 would not have exceeded the target level as it does in the 2023 Budget Bill, but would instead have been below the target level.

Table 2.1 Expanded structural balance

Percent of potential GDP

	2022	2023
2023 Budget Bill, struct. bal., level	0,4	0,7
Electricity support, change		
Congestion rents, higher revenue	+1,0	
Electricity support, higher expenditure		-1,0
Temporarily high payouts, change	-0,3	
2023 Budget Bill, struct. bal., expanded level	1,1	-0,3

Sources: 2023 Budget Bill and own calculations.

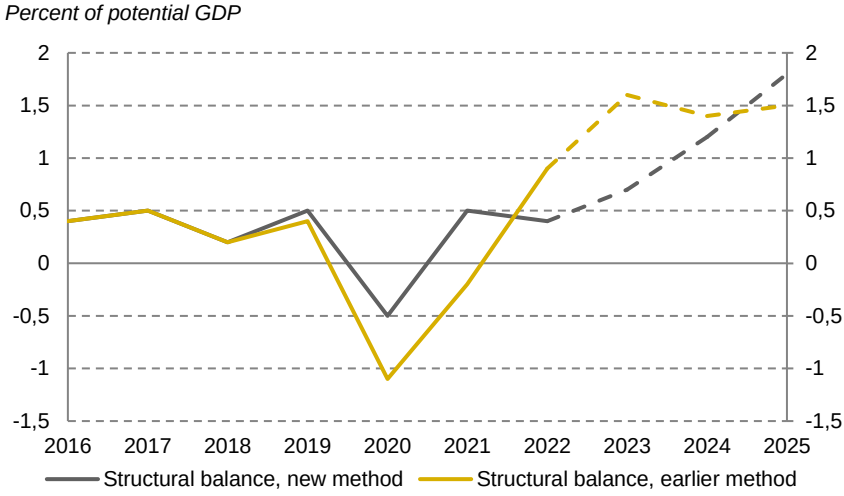
2.1.1 Change of method for calculating potential GDP

Apart from congestion rents, electricity support and dividend revenue, there is another, and more serious complication in the 2023 Budget Bill, namely that in June 2022 the Government changed its method of calculating potential GDP in current prices. In normal circumstances this change of method would not be of such great importance, but the high inflation means that considerable differences arise. Briefly, the change of method means that the effects of inflation on potential GDP in current prices are evened out over time, which leads, in turn, to a more even development of the structural balance. The average structural balance in 2020–2025, and therefore the aggregate fiscal space, is not affected to any appreciable extent, but the effect for individual years is considerable.[37] For 2020–2021 the balance is higher with the new method, but for 2022–2023 it is lower instead (figure 2.2). According to the 2023 Budget Bill the structural balance was 0.4 and 0.7 per cent of potential GDP for 2022 and 2023 respectively. With the old method it would have been higher in both years and would instead have been 0.9 and 1.6 per cent respectively.[38] If the

[37] Swedish National Audit Office (2023) drew attention to the change of method.
[38] According to the Swedish National Audit Office's calculations.

original method had been retained, fiscal policy would thus have appeared to be clearly contractionary in the 2023 Budget Bill.

Figure 2.2 Structural balance using new and old method



Note: Broken lines refer to forecasts.
Source: Swedish National Audit Office (2023)

The structural balance affects, in turn, the space for political measures since this space normally consists of the difference between the structural balance and the level of the surplus target of 0.33 per cent of GDP. With the previous calculation method the space for 2023 would thus have been almost SEK 60 billion larger. However, the change of method does not mean that the space increases permanently, but only means a shift in the distribution between years. With the old method, the peak inflation in 2023 would have a greater impact and create space, but by 2024 the space would then decrease again.

The Government Offices takes the view that the change of method does not have any impact on the space for lasting fiscal policy measures and that it primarily decreases the variation in the structural balance between years instead.[39] The change of method is, however, of great importance for the calculation of the structural balance in 2023, and it is not possible to rule out that fiscal policy assessments and deliberations would have been different if the method had not been changed.

[39] According to conversation with the Government Offices.

The NIER has not made the same change of method as the Government. This means that considerable differences have arisen between the Government's and the NIER's assessments of the structural balance and the distribution of the fiscal space in the coming years. There is certainly no uniform way of calculating potential GDP and these calculations differ between forecasters. The Framework Communication says that the Government will calculate the structural balance using "established methods".[40] The methods are, as stated, not identical and it is difficult to determine what is accommodated in the term "established method". The change of method has, however, contributed to making comparisons of the Government's and the NIER's calculations more difficult. It would therefore have been particularly important to explain why the change of method was made, what effects it has and to what extent it has influenced the direction of fiscal policy. Unfortunately, nothing of this is mentioned in the Budget Bill. While the Government does refer to two technical memorandums about the calculation methods, the effects on the structural balance or assessments of the direction of fiscal policy are not set out there either.

The Council does not take a position on which method is most correct technically but thinks that it is obvious that a change of calculation that has major effects on the structural balance needs to be described, assessed and made available to readers of the Bill. Clarity is a core feature of the fiscal framework.[41] It is remarkable that a change of method that has major effects on a quite central variable for the evaluation of fiscal policy is glossed-over like this.

Temporary variations in a calculated annual fiscal space should not form the basis for the dimensioning of lasting fiscal policy measures. Jumpiness in policy creates problems. It is therefore important to distinguish between temporary and lasting changes of the fiscal space. The present strong variation in the estimated rate of inflation creates difficulties in assessing what is a reasonable fiscal space in the next few years.[42] The NIER's calculations from March 2023 point to an accumulated fiscal space in 2024–2027 of around SEK 100 billion, but this space is spread very unevenly over time and in 2025 there is almost no space at all. The Government's change to its method of calculating

[40] Govt Comm. 2017/18:207, p. 14.
[41] Govt Comm. 2017/18:207, p. 8.
[42] In the 2023 Spring Fiscal Policy Bill, CPIF inflation is estimated to be 5.9 per cent in 2023 and to decrease to 2.2 per cent in 2024.

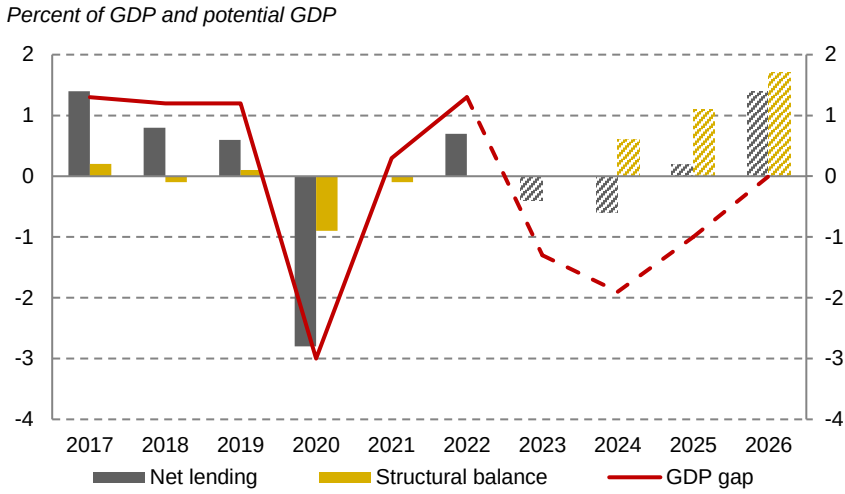
potential GDP contributes to evening out the variations between years, which gives a more even time profile for the annual fiscal space. However, the fiscal space should not solely be assessed annually; account must also be taken of the years after the budget year in question. The central point is that the accumulated space is the same, irrespective of the method chosen.

2.2 The 2023 Spring Fiscal Policy Bill

The Spring Fiscal Policy Bill 2023 estimates the structural balance at 0.0 per cent of GDP in both 2022 and 2023. The deviation from a normal economic situation, the GDP gap, was smaller in 2023 than in the 2023 Budget Bill but was greater thereafter and the gap was estimated to close in 2026, i.e. one year later than in the Budget Bill. Appropriations for 2023 were increased for e.g, defence, housing allowance for families with children, adult education, study support and sick leave costs. In all, appropriations increased by around SEK 4 billion.[43] The structural balance in the present and coming year were not judged to deviate clearly from the target level of 0.33 per cent of GDP and the deviations were estimated to be within the interval of ± 0.5 per cent used as a benchmark for target deviations. The balance is not affected by the electricity support schemes. This is because, in accounting terms, the expenditure for the support coincides with increased revenue since corresponding congestion rents are transferred from SVK to the State and therefore constitute a revenue item (in-depth box 2.1). The Government's assessment was that fiscal policy was in line with the surplus target. The Council shares that assessment. As regards the 2023 Budget Bill, the Council makes the assessment that the weak economic situation could have provided grounds for a lower net lending, but that the high inflation justifies a more restrained fiscal policy.

[43] The measures for 2023 were proposed in the Spring Amending Budget, Govt Bill 2022/23:100 but are not included in the calculations in the 2023 Spring Fiscal Policy Bill.

Figure 2.3 General government net lending and GDP gap



Note: Broken bars and lines refer to forecasts.
Source: Spring Fiscal Policy Bill 2023.

2.3 The budgetary process

According to the fiscal framework, the budgetary process is to be well-organised and unified so that political priorities are made clear and the Riksdag is given an overall picture of the budget and economic policy. A well-organised process contributes to a good analysis and the need for priorities. In principle, the Spring Fiscal Policy Bill is only to contain guidelines for economic and budgetary policy, and amending budgets should normally only contain measures affecting the present year, i.e. no permanent reforms. The Government followed this practice in spring 2023 and the Spring Amending Budget only contained some temporary spending and volume-based adjustments of certain expenditure.

The requirement that the budget has to be presented and adopted in a unified way does not, however, mean that it cannot be amended or supplemented. For example, the Government can submit ordinary amending budgets (in conjunction with the Budget Bill and the Spring Fiscal Policy Bill) or extra amending budgets and Riksdag Committees can raise matters through their own initiatives. Amendments of the budget should, however, be made with restraint. Special reasons are

required to submit an extra amending budget[44] and exceptional reasons are required to be able to submit a proposal relating to the coming budget year after the Budget Bill.[45] During the corona crisis the Government submitted extra amending budgets on a large scale and the pandemic was a special reason for doing so.[46] Thereafter Russia's invasion of Ukraine also came to be a special reason that opened up the possibility of using extra amending budgets.

We discussed this our report for 2022[47] and did not criticise the use of extra amending budgets to handle the corona crisis or expenditure caused by the war. But we did point to the risk that amending budgets are also used for proposals that are not acute and that ought to be dealt with in a regular budgetary process. We stressed that it is important that the use of amending budgets, extra amending budgets and Riksdag committee initiatives becomes restrained again. Amending budgets should be used, in the first place, to supplement or correct the budget on account of external changes that could not be foreseen, and extra amending budgets are limited to occasions when there are special reasons and there is no time to await a regular amending budget.

After the 2023 Budget Bill three extra amending budgets have been presented, they have been justified with reference to the Russian invasion of Ukraine and have been of limited scale. The extensive use of extra amending budgets during the pandemic has thus declined and the budgetary process appears to have been normalised. Against the background of the concern expressed by the Fiscal Policy Council in last year's report, it is important to note the change to the better that has taken place. At the same time, we continue to be concerned about the budgetary process. An erosion of established practice previously took place very quickly, and the improvement that has now taken place is probably bound up with the current parliamentary situation.

2.4 The expenditure ceiling

The expenditure ceiling is intended to contribute to budgetary discipline and credibility for the public finances. The ceiling is set three years in advance, which creates a multiyear perspective and reduces the

[44] Chapter 9, Article 6, second paragraph of the Riksdag Act.
[45] Chapter 9, Article 5, third paragraph of the Riksdag Act.
[46] Swedish National Audit Office (2022)
[47] Fiscal Policy Council (2022), section 2.2.

risk that temporarily high revenue will be used for enduring expenditure commitments. The expenditure ceilings are also intended to make clear priorities between different expenditure areas and will, according to the Framework Communication, create better conditions for achieving the surplus target.

There are no formal impediments to the Riksdag amending an adopted expenditure ceiling, but the established practice is not to do so. During the corona epidemic, however, the expenditure ceilings for 2020–2022 were raised considerably, while the ceiling for 2023 remained at the same nominal level as was decided before the corona crisis. The increases were thus large but temporary. The Council wrote about this in its reports in both 2021 and 2022 and considered that the increases of the ceilings were justified, but underlined at the same time that it was important that the increases were not allowed to lead to weaker budget discipline. However, we took the view that the risk was limited since it was obvious that the increases were due to factors beyond the control of the Government and because the expenditure ceiling was estimated to return to a level that the Government considered appropriate before the corona crisis.

The 2022 Spring Fiscal Policy Bill estimated that the ceiling would be exceeded by SEK 7 billion, and the margin for 2024 was estimated at SEK 20 billion. According to the framework the safety margins for 2023 and 2024 at that time ought to have been SEK 23 billion and SEK 32 billion.[48] The Budget Act says that if there is a risk that an approved expenditure ceiling will be exceeded, the Government shall take measures to avoid this or propose necessary measures to the Riksdag. The Government did not take any such measures and justified this in the 2022 Spring Fiscal Policy Bill by the uncertain situation, but wrote that they had also begun work to be able to revert with expenditure-limiting measures in the 2023 Budget Bill. The Council takes the view that the Government ought at least to have discussed the scale and direction of such measures in the 2022 Spring Fiscal Policy Bill and what trade-offs and priorities could be considered.

One possibility if the expenditure ceiling risks being exceeded is to propose raising it to the Riksdag. It is, however, important that the ceiling is not altered too lightly if it is to retain its credibility and this is

[48] 1.5 and 2.0 per cent of expenditure covered by the ceiling.

why there is an established practice that an adopted ceiling stands. However, a practice has also developed to the effect that it is not reasonable for a new government that wants to change the direction of economic policy to be bound by the outgoing government's expenditure ceiling. Politically grounded changes of the ceilings of this kind took place at the changes of government in 2006 and 2014.

The change of government in autumn 2022 meant that the question of how a threatened expenditure ceiling would be handed remained unanswered. The outgoing government never have a detailed account of how it had intended to handle a threatened expenditure ceiling and the incoming government did not comment on the matter in the Budget Bill.

In the 2023 Budget Bill the new Government proposed increasing the expenditure ceilings as of 2023 and justified this by saying that the change in the direction of fiscal policy required higher expenditure ceilings. The Government made the assessment that the new levels of the expenditure ceilings would provide space for priority reforms in the 2023 Budget Bill and in coming budgets during the electoral term. The ceilings were also judged to secure sufficient margins to be able to handle the unusually great fiscal risks facing Sweden, including more permanently high inflation, a deeper recession and uncertainties around the war in Ukraine. The ceilings for 2023 and 2024 were raised by SEK 126 billion and SEK 150 billion, and the ceiling for 2025 was proposed to be 105 billion higher than the assessment made by the previous Government in the spring (table 2.2).

Table 2.2 Expenditure ceilings in the 2022 Spring Fiscal Policy Bill, the 2023 Budget Bill and the 2023 Spring Fiscal Policy Bill

SEK billion and per cent

		2022	2023	2024	2025	2026
SB22	Expenditure ceiling	1 634	1 539	1 595	1 720	–
	Percent of pot. GDP	*28,6*	*26,0*	*26,0*	*27,0*	–
BB23	Expenditure ceiling	1 634	1 665	1 745	1 825	–
	Percent of pot. GDP	*27,8*	*27,0*	*27,0*	*27,0*	–
	Capped expenditure	1 579	1 594	1 643	1 662	–
	Budgeting margin	55	71	102	163	–
SB23	Expenditure ceiling	1 634	1 665	1 745	1 825	1 860
	Percent of pot. GDP	–	*27,1*	*27,1*	*27,2*	*26,5*
	Capped expenditure	1 559	1 594	1 663	1 689	1 691

Budgeting margin	75	71	82	136	169

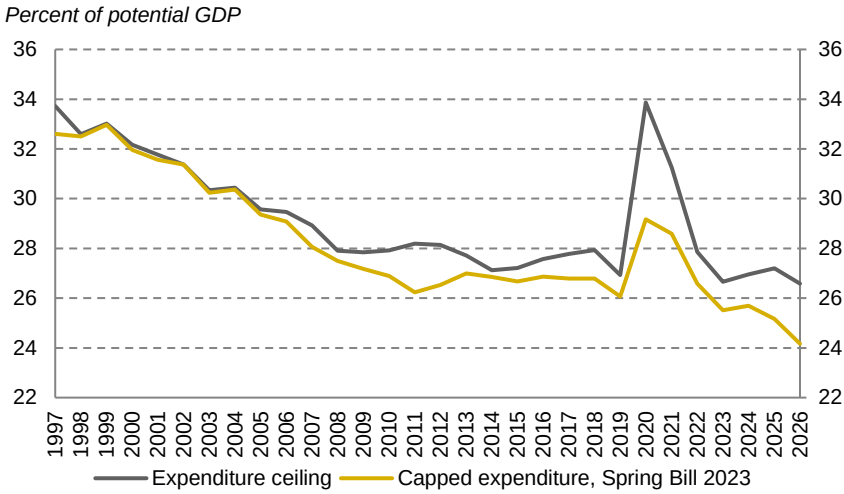
Note: SB=Spring Fiscal Policy Bill, BB= Budget Bill.
Sources: 2022 Spring Fiscal Policy Bill, the 2023 Budget Bill and 2023 Spring Fiscal Policy Bill.

Since the expenditure ceiling is set in nominal terms and the GDP calculations are changed, the ceiling as a percentage of GDP and potential GDP differs from the plans once laid down. In the 2022 Spring Fiscal Policy Bill the ceiling for 2023 was 26.0 per cent of potential GDP. (Table 2.2). However, when first adopted it was 27.1 per cent.[49] The ceilings for 2024 and 2025 were estimated at 27.1 and 27.0 per cent of potential GDP when first presented.[50] After increases in the 2023 Budget Bill the expenditure ceilings for 2023–2025 were 27.0 per cent in all three years. The increases in the 2023 Budget Bill were thus large in nominal terms, but in relation to potential GDP they are better described as a return to the levels that applied when the ceilings for 2023–2025 were set for the first time.

Previous Governments have related the level of the expenditure ceilings to potential GDP, falling weakly during the Alliance period (2006–2014) and an unchanged share in the subsequent two electoral terms (2014–2022). The ceilings proposed in the 2023 Budget Bill mean a continuation of what has mainly applied since 2014, i.e. that the expenditure ceilings are to be an unchanged share of potential GDP. However, the expenditure ceiling announced for 2026 in the Spring Fiscal Policy Bill 2023 was a reduction in relation to potential GDP.

[49] 2021 Budget Bill, p. 65.
[50] The ceilings for 2024 and 2025 were presented in the Spring Fiscal Policy Bills for 2021 (p. 57) and for 2022 (p. 67)

Figure 2.4 Expenditure ceiling and expenditure covered by the ceiling



Note: Potential GDP from the NIER (March 2023) is used in the figure. Broken lines refer to forecasts.
Sources: 2023 Spring Fiscal Policy Bill, NIER and own calculations.

The expenditure ceilings as a share of GDP are an important economic policy variable. Nevertheless, not much space has been given to the reasons for the expenditure levels proposed. More space ought to be given to how the Government views the development of expenditure from a medium-term perspective.

It may be worth noting that to the extent that the expenditure ceiling is set as a share of potential GDP, the previous calculation method discussed above has an effect not only on the space under the surplus target but also on the level of the expenditure ceiling.[51]

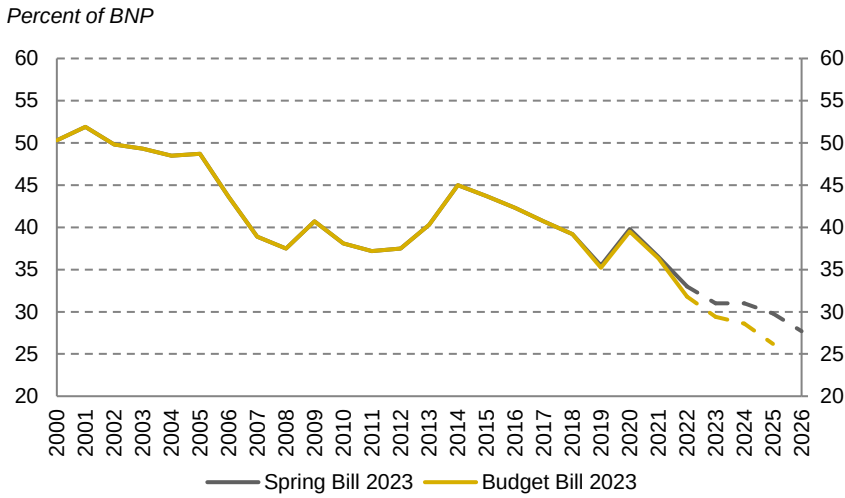
2.5 The debt anchor

The debt anchor was introduced in 2019 as a complement to the surplus target. The idea was not to let the debt anchor steer policy, but to give the fiscal framework a memory and thereby avoid systematic deviations from the surplus target leading to an undesirable development of debt. The debt anchor relates to the Maastricht debt

[51] If the ceiling had been set as a share of potential GDP calculated by the previous method, it would have been higher 2023 and 2024, but lower in 2025.

and is set by the Riksdag at 35 per cent of GDP, which was judged to be a suitable level both to provide economic room for manoeuvre in the event of a deep crisis and a reasonable safety margin to EU's debt limit of 60 per cent of GDP. The debt anchor has a tolerance interval of 10 percentage pounce, i.e. the debt is allowed to vary between 30 and 40 per cent of GDP.

Figure 2.5 General government net debt (Maastricht debt)



Note: Broken lines refer to forecasts.
Sources: 2023 Budget Bill, 2023 Spring Fiscal Policy Bill.

If the debt ratio comes outside the tolerance interval, either regarding the outcome for the previous year or the forecasts for the present or coming year, the Government is obliged to submit a communication to the Riksdag in conjunction with the Spring Fiscal Policy Bill and explain how the deviation has arisen and how it intends to handle it. However, the rules say nothing about which measures, if any, the Government should take if the debt comes outside the tolerance interval.

As a result of the corona crisis, the extensive measures and the decline in GDP of almost 3 per cent, the debt ratio rose by around 5 per cent of GDP in 2020 and reached 39.5 per cent. In 2021 and 2022 the debt ratio fell rapidly, and it was estimated in the 2023 Budget Bill as 31.8 per cent of GDP at the end of 2022. About half of the decline, around 3 per cent, is due to a technical change. The Riksbank has changed its method of financing the foreign currency reserve from

borrowing from the Swedish National Debt Office (NDO) to financing its own foreign currency purchases and has, in 2021 and 2022, therefore increased its own borrowing and reduced its NDO borrowing to a corresponding extent. In the national accounts the Riksbank is not included in the general government sector, which means that the NDO's lower borrowing reduces the Maastricht debt, while the Riksbank's higher borrowing does not raise it. The general government gross debt therefore falls as a result of the change in borrowing.[52] Without this technical change the debt in 2023 would have been just under 35 per cent of GDP. In 2022 the Riksbank made a loss of SEK 81 billion and in 2023 it will need to submit a request to the Riksdag for a contribution of capital to restore its equity to the basic level of SEK 40 billion. This will raise the Maastricht debt to a corresponding extent.

According to the calculations in the 2023 Budget Bill the debt ratio continues to fall after 2022 and is, in 2023, under the debt anchor's lower tolerance limit of 30 per cent of GDP. In the 2023 Spring Fiscal Policy Bill the debt ratio was slightly higher and was estimated at 31 per cent of GDP in both 2023 and 2024. This means that the debt ratio was within the tolerance interval of 30–40 per cent and the Government therefore did not need to submit a communication about the debt anchor to the Riksdag. Even after 2023 the debt ratio is estimated to continue to decrease, but this is partly an effect of the calculation method, i.e. net lending is reinforced in future years since no new measures are included. This should not be seen as a forecast of the most probable development, but should rather be seen as an indication of how the debt will develop in the absence of economic policy measures. The NIER's calculations are instead based on the more realistic assumption that policy is designed so that it is in line with the surplus target and the structural balance is 0.33 per cent of potential GDP. The NIER's calculations then indicate that the debt rather levels out at just over 30 per cent of potential GDP in the next few years instead of continuing to decrease.[53] The development of the debt in the medium term is discussed in more depth in Chapter 6.

[52] The total general government debt, which includes the Riksbank, has, however, not been affected since the lower borrowing via the NDO has corresponded to increased borrowing via the Riksbank.
[53] The NIER has not taken account of the future contribution of capital to the Riksbank.

2.6 Balanced budget requirement for municipalities and regions

The balanced budget requirement means that each individual municipality and region has to budget for net income in balance provided there are no special circumstances. The local government has three years to return to balance if its net income shows a deficit, and its elected council is then required to adopt an action plan for how this will be done. All municipalities and regions also have to exercise good economic management in their own activities and in local government activities conducted by other legal persons. There is, however, no uniform definition of what is good economic management, and guidelines are instead adopted by the elected council in each municipality and region. A guiding used in many local governments is that net income should show a surplus of 2 per cent.

The local government sector's income mainly consists of taxes (around 63 per cent) and their second largest income source is government grants (around 20 per cent) The Government assumes in its calculations that the average tax rate is unchanged and that the local government sector's tax revenue therefore increases in pace with aggregate wages. Government grants vary on account of demographic changes and volume growth in different transfer systems, but no other changes in government grants are included in the calculations. The balanced budget requirement is reached in the calculations by municipalities and regions adapting their expenditure for consumption, which means that the local government sector's expenditure is adapted to the growth of the tax base over a few years. The calculations should therefore nor primarily be seen as a forecast that the local government sector will meet the balanced budget requirement, but should be viewed as an illustration of how local government consumption will develop given unchanged tax rates and adopted changes to government grants at the same time as the balanced budget requirement is achieved. The development of local government consumption according to the 2023 Spring Fiscal Policy Bill is shown in table 2.3.

The local government sector displayed very high levels of net income in 2021 and 2022. This was chiefly because the temporarily increased government grants during the pandemic turned out, in retrospect, to be on the generous side. As temporary pandemic-related

government grants decrease, the local government sector's revenue increase slows, and both net lending and net income decrease rapidly in 2022 and 2023. Towards the end of the period the local government sector's expenditure is adapted to its revenue so that the sector reaches net income in line with good economic management.

Table 2.3 Local government consumption

	2019	2020	2021	2022	2023	2024	2025	2026
Billion SEK	964	990	1 040	1 087	1 162	1 178	1 208	1 256
Percent of GDP	*19,3*	*19,8*	*19,1*	*18,3*	*18,9*	*18,5*	*18,2*	*17,9*

Sources: 2023 Spring Fiscal Policy Bill and own calculations.

Net income for the local government sector in 2021 amounted to just over SEK 42 billion, of which the municipalities accounted for SEK 32.5 billion. Municipalities and regions may allocate surpluses to an income equalisation reserve that can be used to level out income over a business cycle. The good net income in 2021 permitted increased allocations to the income equalisation reserves, which increased by SEK 9 billion between 2020 and 2021 and amounted to almost 40 billion in 2021, of which the municipalities accounted for SEK 30 billion.

Looking forward the government grants decrease in the calculations since temporary government grants linked to the pandemic go down and only adopted and announced changes to government grants are included in the forecast. Revenue therefore grows more slowly than expenditure and the local government sector's net income after financial items returns to SEK 11–23 billion in 2023–2026 from the high levels of net income of SEK 69 billion and SEK 43 billion in 2021 and 2022. The Government's assessment is that the local government sector as a whole with show positive net income in 2022–2026.

2.7 Conclusions

The structural balance is usually used to assess the tightness of fiscal policy. In the 2023 Budget Bill the level of the surplus target was exceeded in 2023 at the same time as the balance rose between 2022 and 2023. The Government therefore described the budget as weakly contractionary. The Council's overall assessment is that the fiscal

policy in both the 2023 Budget Bill and the 2023 Spring Fiscal Policy Bill were in line with the fiscal framework. Normally a structural balance that was clearly lower than the target level would have been more consistent with the framework but the consideration given by the Government to the high rate of inflation also has support in the framework. Whether fiscal policy is reasonable in relation to the economic situation is discussed in Chapter 3.

However, the electricity support, which is the clearly largest single measure for 2023, does not affect any of the budgetary policy targets; this is because of its technical design. The Council considers, like the Government, that the electricity support has an expansionary effect that ought to be weighed in when assessing fiscal policy. The Council considers, however, that there are several unclear points in the Budget Bill that make it more difficult to assess the Government's reasoning, and that it is not clear how the Government arrives at the conclusion that fiscal policy is neutral when the electricity support is taken into account.

The Government has also changed the method for calculating potential GDP, which also affects the structural balance. Since this is the most important indicator of whether the surplus target has been fulfilled, the Government ought to have set out both the reasons for the change of method and how it affects the space for reform and the impulse of fiscal policy. Clarity is a cornerstone of the framework and the lack of clarity in the Budget Bill surrounding both the impulse of fiscal policy and how the change of method affects the assessment of fiscal policy is remarkable.

After the 2023 Budget Bill, three extra amending budgets have been submitted, they have been caused by the Russian invasion of Ukraine and have been of limited scope. The extensive use of extra amending budgets during the pandemic has thus declined and the budgetary process appears to have been normalised. Against the background of the concern expressed in last year's report, it is important to note the change to the better that has taken place. At the same time, we continue to be concerned about the budgetary process. Established practice was previously eroded very quickly, and the improvement that has now taken place is probably bound up with the current parliamentary situation.

The expenditure ceiling was raised considerably in the 2023 Budget Bill for 2023 and thereafter in nominal terms, but the new ceilings

were, at the same time, a constant share in relation to potential GDP, i.e. they followed previous patterns. After the change of government in 2006, the new government had the ambition of gradually reducing the ceilings as a share of potential GDP, while the Government that took office in 2014 chose to retain the ceilings as a constant share. In the 2023 Budget Bill the Government proposed expenditure ceilings that were a constant share of potential GDP, while the ceiling for 2026 announced in the 2023 Spring Fiscal Policy Bill entailed some decrease in relation to potential GDP. General government expenditure as a share of GDP provides important information about the direction of policy. It would therefore be valuable to have more information about how the Government views the future direction of public expenditure.

Consolidated gross debt, i.e. the measure used for the debt anchor, was estimated, in the 2023 Budget Bill, at 29.4 per cent of GDP in 2023, which is just under the lower tolerance limit of the debt anchor of 30 per cent. In the 2023 Spring Fiscal Policy Bill, however, the gross debt was estimated at 31.0 per cent of GDP for both 2023 and 2024. The debt was therefore within the tolerance interval of 30–40 per cent of GDP and the Government was not obliged to submit a communication to the Riksdag. Part of the reason for the decrease in the debt in 2021 and 2022 is that the Riksbank switched from financing the foreign currency reserve via the NDO to self-financing. The continued decline of the debt after 2024 is also due in part to the Government's calculations for the years after 2023 not containing any new fiscal measures. There has been a trend decrease of general government gross debt for a long period. When the surplus target was set at 0.33 per cent of GDP, it was judged to be consistent with a debt ratio of 35 per cent of GDP. There will be reason for the coming framework review to assess both the relation between the surplus target and the gross debt and what are appropriate levels for both.

3 Fiscal policy in times of high inflation and falling demand

The stabilisation policy challenges continue. The pandemic characterised economic policy in 2020–2021 and had hardly released its hold before inflation rose dramatically at the same time as growth prospects deteriorated rapidly. As indicated in Chapter 1, these developments were not wholly independent of one another; part of the high inflation in 2022 was due to a rapidly rising pent-up demand, an expansionary economic policy and lingering supply restrictions after the pandemic. However, the extremely high inflation in Europe and in Sweden was, in the first place, a consequence of Russia's invasion of Ukraine.

In this chapter we evaluate the Government's fiscal policy from a stabilisation policy perspective with a particular focus on the situation when the budget was presented in autumn 2022. Then it was clear that 2023 would be characterised by both high inflation and generally weak demand. Both monetary policy and fiscal policy therefore faced difficult choices.

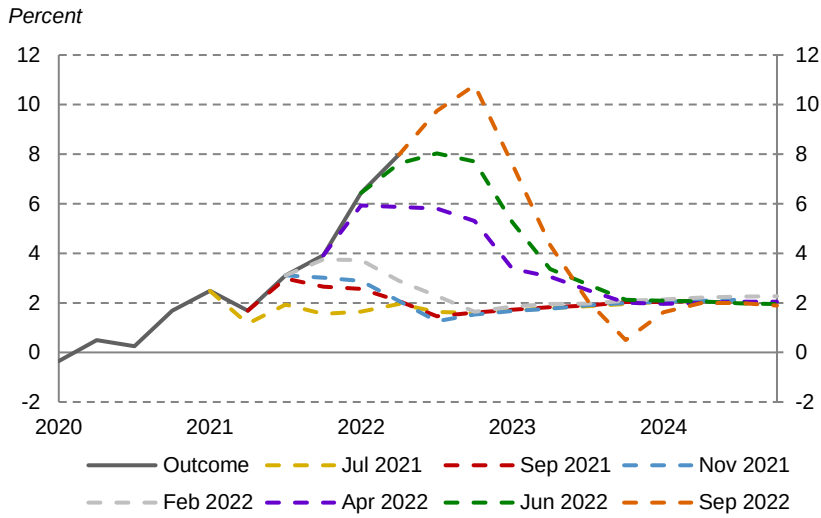
We begin the chapter with a description of what the prospects for the future looked like in early autumn 2022 when the budget was prepared. Then we discuss, more in terms of principles, how stabilisation policy should be viewed when high inflation goes hand in hand with falling demand. Finally, we appraise the policy conducted focusing on fiscal policy as it was expressed in the 2023 Budget Bill, the 2023 Spring Fiscal Policy Bill and the support schemes introduced for electricity consumers.

3.1 Situation for stabilisation policy in autumn 2022

In the autumn several factors contributed to great uncertainty surrounding the economic prospects for 2023. One important factor was, of course, how the invasion of Ukraine would develop and how this would, in turn, affect the European economy. Russia's conduct was also the most important cause of the high inflation, including the high electricity prices, which were expected to rise further in the approaching winter.

However, inflation had already started to rise in autumn 2021. Initially the Riksbank interpreted the higher inflation as temporary. This turned out not to be so, and up until September 2022 the Riksbank had revised its forecasts upwards during a period of more than one year (figure 3.1). In its September forecast the Riksbank predicted that inflation would start to decrease at the end of 2022, but there was great uncertainty regarding both the development of electricity prices and the extent to which these companies would pass cost increases on to consumers.

Figure 3.1 Inflation and the Riksbank's forecasts



Note: Information measured according to CPIF, quarterly observations. Outcome up to and including second quarter 2022.
Sources: Statistics Sweden and Riksbank forecasts.

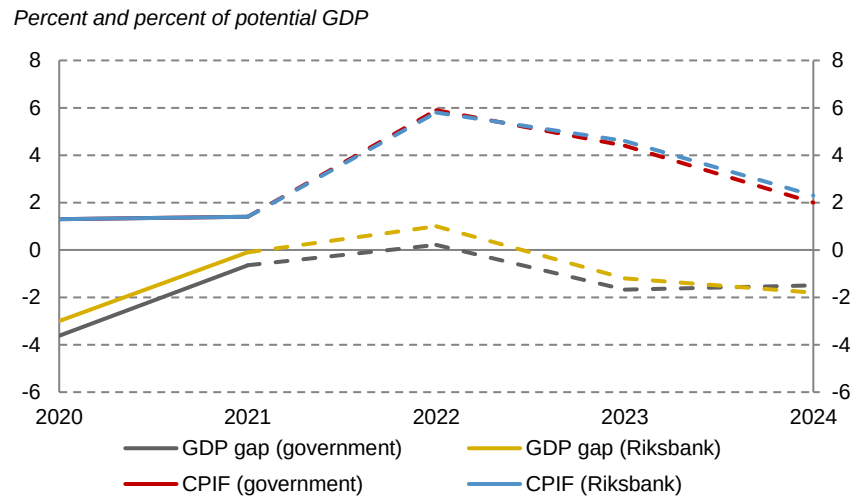
Recurring upward revisions of its inflation forecast led to the Riksbank realigning monetary policy starting in April 2022. Just less than six months later, when the Budget Bill was being drafted, the policy interest rate had been raised to 1.75 per cent at the same time as the quantitative easing measures had begun to decrease.[54] The rapid change of scene can be illustrated by the fact that in February 2022 the policy rate was forecast at 0 per cent in 2024, while the forecast six months later, in September 2022, was 2.5 per cent.

[54] This did not take place via sales, but by not reinvesting maturities.

Monetary policy thus moved in a contractionary direction and contributed to both the Riksbank and the Government expecting a recession in 2023 (figure 3.2). The Riksbank's justification of the substantial interest rate increases included the observation that it was important that the social partners relied, ahead of the round of wage negotiations, on inflation coming down to desirable levels within not too long a time. This was not obvious since inflation expectations had risen sharply looking both one and two years ahead, even though the increase looking five years ahead was much smaller (figure 3.3).

The Riksbank's interest rate increases meant sharp rises in interest rates on both corporate loans and home loans. The Riksbank also forecast further increases in 2022 and 2023. Interest costs after tax deductions for interest payments would then double as a share of disposable income by the end of 2023 compared with the end of June 2022.[55] This corresponds to an increase of around SEK 70 billion, corresponding to just over 2.5 per cent of households' disposable income. The high interest rate levels also contributed to a fall in house prices of around 15 per cent in 2022 (chapter 1).

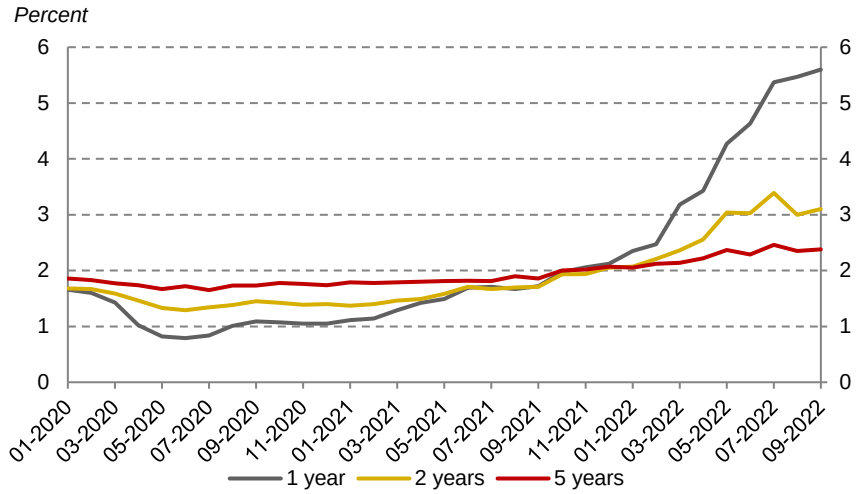
Figure 3.2 Forecasts autumn 2022



Note: Broken lines refer to forecasts.
Sources: 2023 Budget Bill and Riksbank (2022b).

[55] Riksbank (2022b).

Figure 3.3 Inflation expectations

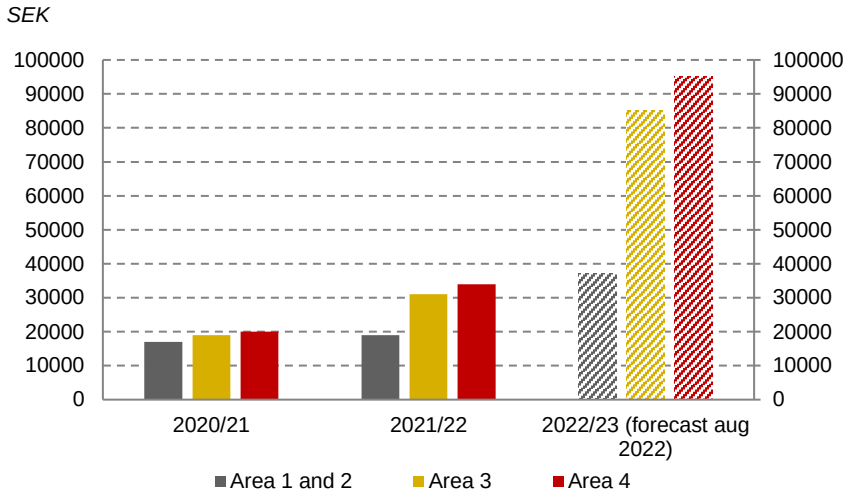


Note: Money market participants, quarterly observations. The last observation is on 1 September 2022.
Source: Kantar Prospera via the Riksbank (2022b).

Moreover, in the autumn food prices were expected to rise by around 15 per cent for the full year 2022. This corresponds to just over SEK 40 billion, or just over 1.5 per cent of households' disposable income. Higher interest and food costs can be set in relation to how the rising electricity prices were expected to affect households. Forward pricing in autumn 2022 showed that the electricity price was expected to rise substantially in the coming winter. Households in electricity areas 1 and 2 risked a doubling of electricity costs for the six-month period October 2022–March 2023 compared with the same period in the previous year (figure 3.4).[56] The corresponding comparison for electricity areas 3 and 4 meant almost a tripling of electricity prices. Based on the average consumption in these months, this corresponds to a cost increase of around 95 billion for the whole of the country, or just over 3.5 per cent of households' disposable income, compared with the same period the previous year. In all, the higher interest costs in combination with the large price increases therefore put considerable pressure on households' disposable income.

[56] Refers to the total cost, i.e. electricity consumption, grid charge and all taxes.

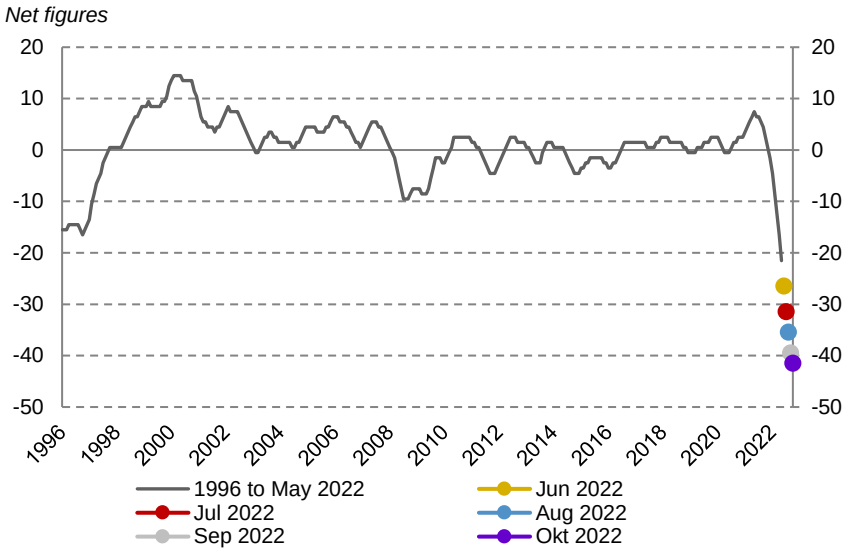
Figure 3.4 Electricity costs October–March



Note: Refers to households in single-family homes with an annual consumption of 20 000 kWh (68.5 per cent of which is consumed in October–March). The forecast in August 2022 for the period October 2022–March 2023 is based on an average electricity price to customers of SEK 2.7 (electricity areas 1 and 2), 6.1 (electricity area 3) and 6.9 (electricity area 4) per kWh from the forward prices on Nasdaq on 29 August 2022. Electricity costs are rounded to the nearest thousand and include costs for electricity trading agreements, electricity grid charges, energy tax and VAT.
Sources: Stockholm Chamber of Commerce (2022) and own calculations.

The increased costs and forecasts that entail further cost increases were probably an important reason why households expressed great concern in autumn 2022 about their own finances in the coming year according to the Economic Tendency Survey. Their concern was much greater than during the financial crisis in 2008–2009 (figure 3.5). Business sector expectations of future sales also fell sharply in August–October 2022 but did not reach the same low levels from a historical perspective as households' expectations.

Figure 3.5 Households' view of their own finances in 12 months



Note: Deviation from average during the period. Net figures are calculated as the difference between the share of positive replies and the share of negative replies to a question. The net figure is at most 100 (if all respondents give a positive reply) and at least -100 (if all respondents give a negative reply).
Source: NIER.

The Government made the assessment that households' consumption would decrease in real terms in 2023 compared with 2022, which has only happened once previously (2020) since 2000. One explicit purpose of the electricity support schemes promised in autumn 2022 was to support households and businesses. Since the financing of the support schemes went via Svenska kraftnät (SVK), the electricity support scheme was not included as an appropriation in the central government budget.[57] Considering demand in the economy, however, the aggregate support schemes to electricity consumers were by far the largest economic policy measure announced in 2022 (section 2.1). In the Budget Bill the Government writes that payments would total around SEK 60 billion in 2023, but there was no statement of how much was assumed to go to households and to businesses. Since households account for around 30 per cent of electricity consump-

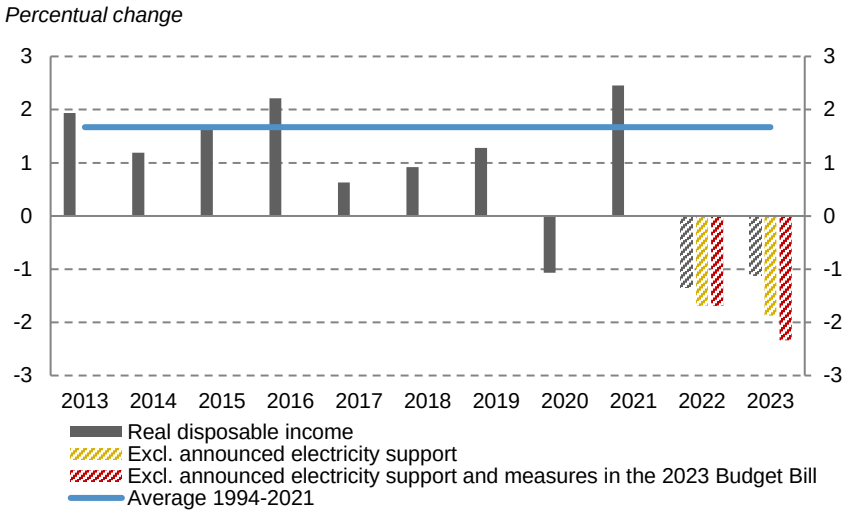
[57] The more limited support to electricity-intensive companies was an appropriation in the 2023 Budget Bill at the same time as the Government intended to examine whether the SVK's congestion rents could be used for this purpose.

tion[58], it was reasonable to assume that households would receive around SEK 18 billion in support; this turned out to be a good estimate since households received payments of around SEK 17 billion from this support in February 2023. Chapter 4 describes the electricity support schemes in more detail and presents the assessment that the electricity support schemes paid to households in 2022 and 2023 totalled SEK 36 billion.[59]

In addition to the electricity support promised, the 2023 Budget Bill contained direct and indirect reinforcements of households' finances of just under SEK 12 billion.[60] Even though the bulk of these reinforcements increased households' disposable incomes, the forecast of the growth of households' *real* disposable incomes per capita was historically weak in 2023, -1.3 per cent (figure 3.6, grey bar) The main reason was the high inflation (section 1.2). Without the electricity support promised, real disposable income per capita would have fallen by 1.9 per cent in 2023 (yellow bar) and if the measures in the 2023 Budget Bill targeted at households are also subtracted the decrease is 2.3 per cent (red bar). This can be compared with the average rate of increase of 1.7 per cent in recent decades (blue line).

[58] Svenska kraftnät (2022).
[59] Households were to receive three electricity support schemes: SEK 9 billion in spring 2022, 17 billion of the support announced in the 2023 Budget Bill and SEK 10 billion that was announced in January 2023.
[60] Retained level of benefits in unemployment insurance funds (SEK 5.8 billion), reinforced travel deduction (SEK 1.8 billion) and lower tax on petrol and diesel (about SEK 4 billion).

Figure 3.6 Real disposable income per capita



Note: The NIER's forecast from September 2022 corrected for the Government's electricity support promised in the 2023 Budget Bill. Electricity support to households refers to SEK 9 billion in spring 2022, SEK 17 billion paid in February 2023 and SEK 10 billion that has still to be paid. "Measures" also means measures in the 2023 Budget Bill targeted at households amounting to just under SEK 12 billion: retained level of benefits in unemployment insurance funds (SEK 5.8 billion), reinforced travel deduction (SEK 1.8 billion) and lower tax on petrol and diesel (SEK 4 billion). However, the latter measure only affects real disposable income to the extent that the price level decreases to a corresponding degree. In the NIER's forecast of real disposable income (grey bar), the NIER's assumptions concerning electricity support to households have been replaced with the above-mentioned amounts.
Sources: 2023 Budget Bill, NIER (2022a) and own calculations.

The total electricity support to households is thus judged to amount to SEK 36 billion, which corresponds to 1.4 per cent of disposable income and 0.7 per cent of GDP. Whether this was an appropriate measure from a stabilisation policy perspective depends on how this additional finance would influence households' consumption, which is not easy to judge. In normal times general support like the electricity support schemes has a smaller effect than if the support is given to households with small margins. This is because households with small margins increase their consumption to a greater extent when they receive an income increase.[61] Possibly the situation in 2022 was slightly different. At noted above, concern about the future was uniquely great and closely linked to electricity prices specifically. The price rises were

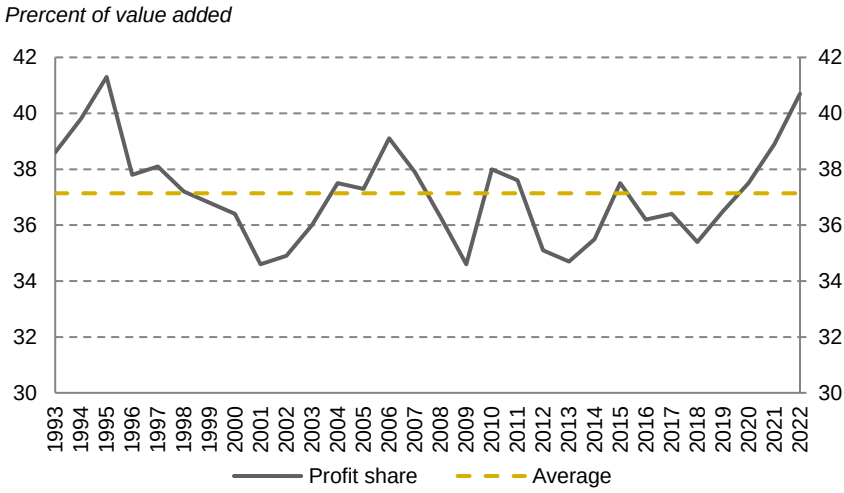
[61] Source: NIER (2021). In addition, there are redistribution policy arguments for supporting households with small margins given the historically weak development of real incomes. This is, however, mainly a political issue.

very extensive and might therefore – if support had not been promised – have led to a broader slowdown of consumption, when households in slightly higher income brackets would also have been forced to hold back. The general support probably cushioned this concern and may therefore have had a greater effect on households' consumption than in a more normal situation.

The around 60 billion in electricity support signalled in the 2023 Budget Bill also included support to businesses. Since businesses account for about 70 per cent of electricity consumption, their share corresponds to around SEK 42 billion.[62] The empirical knowledge about how temporary support schemes for businesses influence the development of the economy is limited compared with support to households. For several reasons, however, businesses are hit to a smaller extent than households by high electricity prices. As set out in chapter 4, there are indicators that large consumers of electricity have long fixed-electricity price agreements to a great extent and have therefore not been hit that much by the price rises in 2022. Moreover, these businesses have passed on their higher costs via price increases to consumers to a high degree.[63] Households' income, in practice mostly wages, have not increased to the same extent as prices. In many industries the overall effect is that the profit share increased in 2022 (figure 3.7).[64] Against this background, it is likely that the support schemes promised for businesses have not contributed to any great extent to keeping prices down and have therefore not contributed to maintaining demand either.

[62] Businesses are judged to receive a total of SEK 31 billion in electricity support: SEK 29 billion in general support and SEK 2 billion in support to electricity-intensive industries (chapter 4).
[63] Electricity support to businesses could have reduced the need for this, see NIER (2022b).
[64] According to the NIER (2022c, table 16), the profit share increased in 12 industries and decreased in 6 industries between 2021q2 and 2022q2. According to the NIER (2022d, table 13), the profit share in 2022q2 was higher than the average since 2000 in 15 industries while it was lower in 5 industries.

Figure 3.7 Profit share in business sector



Note: The gross profit share for the business sector incl. sole traders, excluding single-family homes and secondary homes.
Source: NIER statistical database.

As described in section 2.2, the scale in the 2023 Spring Fiscal Policy Bill was limited: measures amounting to around SEK 4 billion, where the largest active measures were reinforced housing allowance for families with children (SEK 0.7 billion) and expanded adult education (SEK 0.5 billion).[65]

3.2 Fiscal principles

It was this situation – high inflation, rapidly rising interest rates and an approaching recession – that characterised the Budget Bill presented on 8 November.

The interplay between fiscal and monetary policy is usually considered in the literature to take place by fiscal policy laying a long-term foundation for policy and therefore often acting first in practice. The more mobile monetary policy can therefore often be designed with knowledge about fiscal policy.[66] This system is mainly explained by noting that decisions on fiscal policy are made relatively seldom and

[65] In addition to the 2023 Spring Fiscal Policy Bill, measures for around SEK 3 billion have been adopted after the 2023 Budget Bill; most of them concern support to Ukraine.
[66] Fiscal policy is what is called a *Stackelberg leader* and monetary policy is a *Stackelberg follower*, see Calmfors et al. (2022), appendix A.2.

that, moreover, fiscal policy has many other purposes than stabilising the economy. Normally the interplay between fiscal and monetary policy is not that complicated. When the economy is on the way down, and there is reason to conduct a more expansionary fiscal policy, the inflationary pressure usually decreases. This provides scope for the Riksbank to reduce the interest rate, and policy in both areas therefore pulls in the same direction. The same tends to apply, but with the opposite features, when inflation increases.

When negative supply disturbances play an important role for developments, and there is a risk of high inflation despite weak demand, it is more difficult to design policy. Then fiscal and monetary policy should work together so that inflation can reach the target level while avoiding too deep and protracted a recession. When fiscal decisions are made, it is not solely the usual uncertainty that almost always characterises assessments of the economy that needs to be taken into account. It is also essential to appraise inflation and consider what monetary policy it can justify. The more expansionary the fiscal policy, the higher the interest rate may need to be. Moreover, the risks of financial instability must be weighed in. With higher interest rates, there is more risk of problems in the housing market, in the first place, but also in the banking sector. Part of the picture is that effects of this type are very hard to assess.

So, is there any space for fiscal measures? Yes, there is, but any fiscal measures need to be examined more strictly than usual, even if the fiscal policy framework as such would permit a more expansionary policy.[67] Two types of economic policy measures are usually considered to be particularly justified when concern about inflation restricts fiscal policy.[68] If it is possible to take measures that relatively quickly improve the supply side of the economy, i.e. improve the possibilities of increasing production, then that is desirable. It is beneficial for the growth of prosperity at the same time as it contributes to reducing the inflationary pressure. It is also reasonable to take measures to mitigate the effects of inflation on those in the

[67] As described in section 2.1, fiscal policy must, according to the Framework Communication, take into account that monetary policy must be able to "deal with" the effects on demand of fiscal policy. This is wording that provides scope for different interpretations, for instance that a more expansionary fiscal policy would have been consistent with the framework. However, wording of that kind does not mean that this fiscal policy necessarily would have been appropriate.
[68] IMF (2023b).

most vulnerable economic situation. But it is not possible to ensure the whole of the population against income losses when the country has become poorer on account of negative supply disturbances.

When the problems of high inflation are considered to be sufficiently serious, the Riksbank may need to communicate that it would like to see fiscal policy being of some help. The extent to which fiscal policy then takes account of inflation is a question that the Riksbank and the Government can assess in different ways. But since it is the Riksbank that is responsible for ensuring price stability, it is likely that a fiscal policy, viewed by the Riksbank as too expansionary, ultimately means greater monetary policy tightening, in practice a higher policy rate. If fiscal and monetary policy are pulling in different directions in this way, the results in both policy areas can be worse than otherwise. In the worst case, economic policy suffers a crisis of confidence, as happened in the UK in the autumn.

In this context, it can be noted that the interplay with monetary policy had a prominent role in the Fiscal Framework Communication from 2011. "Monetary policy" was mentioned 31 times and one point made was that fiscal policy would not make it more difficult for the Riksbank to reach its inflation target.[69] The present Framework Communication from 2018 tones down this interplay, and monetary policy is only mentioned once: it is noted that fiscal policy has to be conducted in such a way "that the effects on demand are not greater than can be dealt with by monetary policy".[70] In additional to being short on detail, this wording is unclear since monetary policy always "can deal with" high inflation using the interest rate weapon when there is a floating exchange rate.

3.3 Scale of fiscal policy in relation to the economic situation

The Government was faced with a challenging stabilisation policy situation in autumn 2022; high inflation was expected to coincide with an approaching recession. Then one central question was how much the Government's measures ought to affect aggregate demand and inflation. To begin with we start from the Government's new method

[69] Govt Comm. 2010/11:79.
[70] Govt Comm. 2017/18:207, p. 15.

of calculating the structural balance (section 2.1) and then comment on any implications of the change of method.

As stated in section 2.1, the Council considers that both the level of and the change in the structural balance are consistent with the fiscal framework. If inflation had not been as high, a lower structural balance in 2023 would have been more consistent with the framework, but there is scope in the framework to take account of the challenges of monetary policy. In this section we discuss whether fiscal policy is *reasonable* from a stabilisation policy perspective.

As described in section 2.1, account needs to be taken of the fact that congestion rents and electricity support affect demand in the economy even if they are mainly reported off-budget. In addition, temporarily high capital income, mainly from Vattenfall, is excluded from the analysis of the structural balance. With these adjustments, the expanded structural balance is 1 per cent in 2022 and -0.3 per cent in 2023 (table 2.1, Chapter 2).[71] Then fiscal policy is expansionary in 2023 since the balance is 0.6 percentage points below the surplus target. Fiscal policy is also moving in an expansionary direction since the expanded balance deteriorates by 1.3 percentage points in 2023.[72]

However the cyclical analysis of fiscal policy also needs to take account of how the effects of the support schemes can be expected to be spread between different years. It is probable that the effect of fiscal policy on demand growth is smaller in 2023 than indicated by the deterioration of 1.3 percentage points in the expanded balance. This is because the largest electricity support scheme was already announced in August 2022. An expectation of support probably meant that the loss of demand from the congestion rents was reduced in 2022 since electricity customers already relied at that time on part of the electricity support that came to be paid in 2023.[73] The electricity support schemes announced therefore already contributed to demand in 2022, which means that the expansionary effect in 2023 when these payments were made is smaller. The effect of fiscal policy on the development of demand between 2022 and 2023 is therefore smaller than indicated by the decrease in the expanded structural balance of 1.3 percentage points. Furthermore, the Council makes the assessment, as mentioned

[71] In the 2023 Budget Bill the structural balance is marginally above the surplus target in 2022 (0.4 per cent) and increases to 0.7 per cent in 2023.

[72] See section 5.1 for descriptions of fiscal policy terms.

[73] This is based on most households not being limited by liquidity, which is in line with the surveys conducted by Finansinspektionen; Finansinspektionen (2020).

above, that the demand effects of the general electricity support to businesses of some SEK 30 billion are probably limited.

Due to the special factors that need to be taken into account this time, it is, of course, more uncertain than usual to assess the effect fiscal policy, as a whole, on demand. The Council's assessment is that, with reasonable adjustments of the structural balance, fiscal policy can be regarded as slightly expansionary in 2023. In the prevailing economic situation, the framework permits an even more expansionary direction of fiscal policy. As indicated in the previous section, however, there is wording to the effect that fiscal policy can, when required, take account of monetary policy's challenges with inflation. The Government also justifies what it assesses as the neutral direction of the budget[74] by saying that its policy should not make it more difficult for the Riksbank to overcome the high inflation.

As described in section 2.1, the Government has changed its method for calculating the structural balance as a share of potential GDP in current prices, which affects the calculation of the structural balance. If the Government had retained its previous method, the expanded structural balance would have been weakly contractionary in relation to the surplus target instead of weakly expansionary; 0.6 instead of -0.3, which the new method results in.[75] At the same time, the rationale for what is an appropriate fiscal policy – the GDP gap and the high inflation – has been unchanged. So the change of method does not influence the assessment of the scale of fiscal policy measures – in SEK billion – that the economy can withstand in the current situation. Had the Government retained its previous method, the Council's assessment of fiscal policy as a whole would therefore essentially have been the same. This underscores the importance of not making unreflecting use of the annual structural balance as a lever for fiscal policy. Normally an in-depth analysis is required that takes account of the special circumstances that influence both the calculation of the balance and the assessment of the economic situation including inflation.

Summing up, the Council considers that it was reasonable of the Government to highlight and take account of the high inflation and

[74] The Government describes its budget as neutral since the electricity support schemes are included; they describe the budget, excluding the electricity support schemes, as slightly contractionary, see chapter 2.

[75] Account has then been taken of the adjustments made in section 2.1 (table 2.1) concerning congestion rents, electricity support and extraordinary circumstances.

therefore conduct a more restrained fiscal policy than would have been normal, given the approaching recession. This applies to both the 2023 Budget Bill and the 2023 Spring Fiscal Policy Bill. It is hardly possible to make an exact assessment of how stringent fiscal policy should be so as to not make combating inflation distinctly more complicated. This requires, as we have noted, not only the type of assessment that must be made in a normal year of how the economy is developing, but also an appraisal of monetary policy and the conditions for it. In the view of the Council, it is possible to justify the line chosen by the Government, but it would probably also have been possible to conduct a slightly more expansionary fiscal policy without this resulting in substantial problems for monetary policy. It is probable that there is space to turn policy in a more expansionary direction if the economy declines more than foreseen and inflation decreases clearly.

3.4 Should fiscal policy have been designed using other measures?

While the Council is largely positive to the scale of fiscal policy, this does not mean that we consider that it was wise to rely to such a high degree as was done on price support for electricity use. As we set out in the next chapter, some support to cover rising electricity costs was reasonable given the applicable regulations, but the support schemes ought to have been smaller, especially regarding support to businesses.

It is not difficult to understand that support to cover rising electricity costs was put in place. Electricity prices rose after Russia's invasion of Ukraine and the price rises gained pace in the summer. For many households this meant, along with higher interest rates and other price increases, a dramatic deterioration of their financial margins. There was also great uncertainty about how high electricity costs could get in the winter. The electricity support schemes promised therefore probably contributed to maintaining households' consumption. Support had also begun to be rolled out in other countries, and there was a hope that the support could be put in place fairly quickly.

Less extensive electricity support for households would have been appropriate for several reasons. In general, support to compensate for rising prices is inappropriate since it counters a necessary adaptation of demand. This also applies to the electricity market, which we will

come back to in chapter 4. The electricity support also goes to households with higher incomes who have margins and can reprioritise their consumption or reduce their savings to cope with temporarily higher costs.[76] General electricity support schemes have therefore meant that many households who would have been able to cope with temporarily higher electricity costs without problems have received substantial support. A less extensive general electricity support scheme would have made it possible to have both supply measures that would have been able to improve the long-term prospects for growth in the economy and more measures targeted at households with small margins that have been hit by substantial cost increases. The reinforced housing allowance for families with children in the 2023 Spring Fiscal Policy Bill is one example of a well-targeted measure. Among supply measures, mention can be made of reduced tax for low-income earners, matching measures in the labour market and the promotion of energy production.

However, if support to businesses had been replaced with measures to stimulate demand, the effect on demand would have had to be taken into account since the support schemes for businesses are not judged to have any significant effect on the development of the economy. However, the Council considers, as stated above, that the direction of fiscal policy could have been slightly more expansionary, which would have opened up for additional targeted measures. It would, of course, also have been possible to – partly or fully – finance desirable temporary or permanent measures and thereby avoid bolstering demand too much.

3.5 Conclusions

The Government faced unusually difficult choices in autumn 2022. Developments in the past six months had been strongly marked by Russia's invasion of Ukraine, which had major effects, especially on the security policy situation but also on inflation. The course of the war was of great importance for future economic developments. In addition to this uncertainty there were difficulties in assessing lagging effects of the pandemic and the more normal issues regarding the development of the economy. As if this was not enough, the high

[76] Finansinspektionen (2020).

inflation in combination with an economy in downturn meant that the Government was forced to also give weight to monetary policy in its decisions in a way that had not been necessary for decades. A policy that appeared to be reasonable in view of the development of the economy also needed to be appraised on the basis of the effects it could have on inflation and on the Riksbank's possibilities of avoiding excessive interest rate increases.

The uncertainty in all these respects makes it more difficult than usual to accurately appraise the direction of policy. This may possibly be the explanation of why it has been more common in the debate in the past six months for there to be different views about what is right or wrong. It is one thing to say that fiscal policy should not be too expansionary since it has to be able to make the task of monetary policy easier. But this does not necessarily mean that the policy should be as tight as possible. It is, however, obvious that fiscal policy should not be so expansionary as to force very substantial interest rate increases. Such increases could lead to hard-to-control effects on, for instance, housing prices, ultimately disturbing financial stability. In the worst case, a fiscal policy wholly at odds with monetary policy ambitions could lead to distrust in Swedish economic policy as a whole in the way that happened in the UK in autumn 2022.

When the budget was presented in autumn 2022, inflation was undeniably the most acute stabilisation policy problem. The concern that inflation would persist was reinforced by the fact that the social partners were negotiating on new agreements to be reached in spring 2023. The Riksbank therefore considered that it was necessary to quickly raise its policy rate. In normal circumstances, the weak economic situation expected could have justified a more expansionary fiscal policy than proposed by the Government. The Council considers, however, that the overall fiscal policy – including the congestion rents and electricity support – was reasonable given the risks that the high inflation would persist. A slightly more expansionary fiscal policy would probably also have been possible without making the task of monetary policy substantially more difficult. However, the comparatively restrained direction of fiscal policy means that, as things look now, there will be good possibilities for the Government to revert with additional measures if the development of the real economy is worse than expected at the same time as the picture regarding inflation gets brighter.

The Council's view does not mean that fiscal policy should always "help" the Riksbank to reach its inflation target. Fiscal policy has many purposes and is to be conducted so that the surplus target is reached over a business cycle. Normally, fiscal policy should be contractionary in a boom and expansionary in a recession. If inflation is very high or very low, it can be appropriate to weigh in how fiscal policy affects inflation. The Council notes, in this context, that the present framework has very little to say about what stance fiscal policy should have in relation to monetary policy, and it is appropriate to develop this part in the next review.

When it comes to the fiscal policy measures used by the Government there is reason to be more critical. A very large part of the support provided has been paid in the form of support for rising electricity costs. In general, price supports are problematic since they counteract transition and greater efficiency. In the acute situation that arose in autumn 2022, with great concern among households about economic developments, and the regulations surrounding the use of congestion rents, the Council has some understanding for the decisions made. There is, however, much to indicate that it would have been better for policy to make more use of measures that could have contributed to the better functioning of the economy. Examples could be tax reductions for low-income earners, measures that improve matching in the labour market and promotion of energy production. Measures targeted at reducing the cost burden for particularly vulnerable households also appear to be natural, even though some action has been taken in this area through uprating, reinforced housing allowance and retaining the level of benefits in unemployment insurance funds. The Council is particularly questioning about the broad electricity support announced for businesses. Since businesses have good possibilities of compensating themselves for increased electricity costs in various ways, it is doubtful whether the support schemes for businesses influence economic developments to any significant extent. With the exception of the electricity support for electricity-intensive companies, there is a great risk that electricity support schemes will mainly increase businesses' profits.

4 Electricity support for households and businesses

Since the autumn of 2021, electricity prices in Europe have been at historically high levels. The main cause is the sharply reduced import of Russian natural gas following Russia's war of aggression in Ukraine; even countries that use very little natural gas, like Sweden, are affected as the European electricity market is interconnected. Within Sweden, prices have been considerably higher in the southern parts of the country, owing to limitations in the transmission of hydroelectric power from Norrland as well as to the interconnection with the European electricity market to the south.

Following high prices, the European Commission has introduced temporary regulation to enable electricity support for households and businesses. Swedish households have received around SEK 26 billion in electricity support, and further support of around SEK 10 billion has been announced. For businesses, support of around SEK 31 billion has been promised. In all, this means that electricity support totalling SEK 67 billion will have been paid out in 2022 and 2023. The support is therefore the largest economic policy measure taken in the past year.

Public support payments being granted to households and businesses owing to rising costs raises several questions. Chapter 3 discussed the topic from a stabilisation policy perspective. This chapter will discuss how recurrent support, including the scale and design of this support, may affect price formation and the incentives for energy transition. A central point of departure for the Council's assessment is that policy should be designed so as to minimise the risk of high electricity prices. Since electricity prices are directly related to the demand for electricity, as we describe in section 4.1, it is of particular importance that the policies stimulate energy-efficiency measures and reductions in electricity use. The expectations of consumer electricity costs, including support payments, that are formed by policy, are of crucial importance to this.

This chapter begins with a description of the factors that in the short and middle term affect the development of electricity prices in Europe and in Sweden. We will then describe the framework provided by EU regulations, including those that the EU has adopted in light of

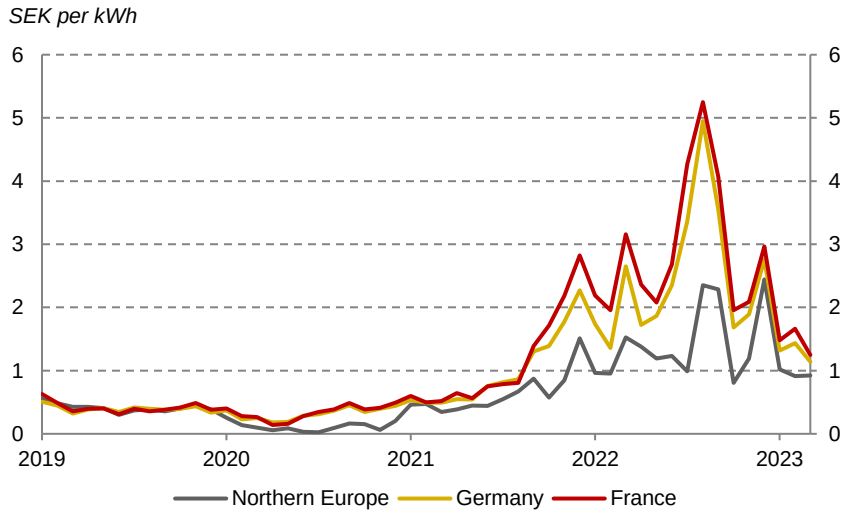
the energy crisis, and the constraints imposed on the scale and design of electricity support. Then follows an analysis of the Swedish support schemes, and the conclusions of the Council end the chapter.

4.1 The electricity market and its development

4.1.1 Development of electricity prices

Since the autumn of 2021, electricity prices in Europe have been considerably higher than they have previously been. There has also been more variation in electricity prices between countries than before. For example, the average electricity price in Germany was more than 500 per cent higher in 2022 than in 2019, and in France the average was over 600 per cent higher. In the Nordics, the increase was around 250 per cent. Electricity prices have remained relatively high across all of Europe during the beginning of 2023 (see figure 4.1).

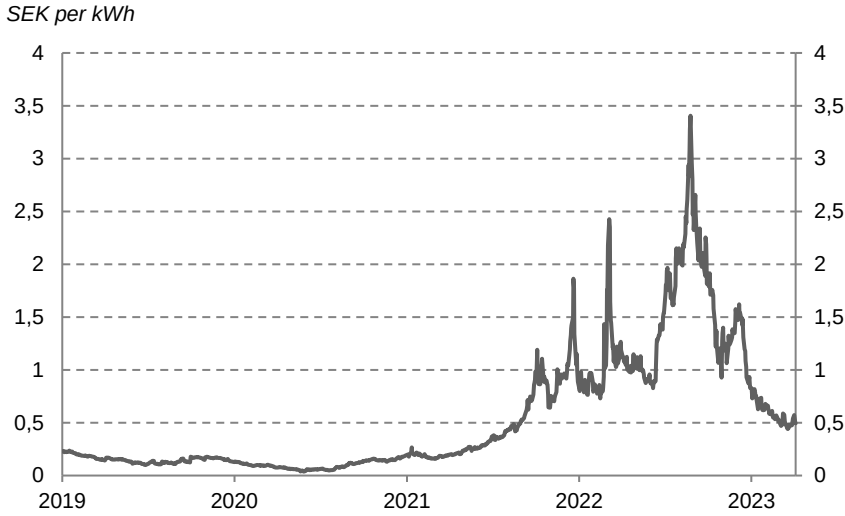
Figure 4.1 Electricity prices in Europe



Note: Monthly average. The figures refer to spot prices on the wholesale electricity market, i.e. before any taxes etc.
Sources: EEX and Nordpool via Macrobond.

There are several reasons why electricity prices in Europe have been unusually high since the second half of 2021.[77] As we stated in the introduction to this chapter, the most important factor is the high price of natural gas since imports of Russian gas essentially ceased following Russia's invasion of Ukraine. Gas prices began rising substantially as early as in the autumn of 2021, and there were uncertainties at that point about supply going forward (figure 4.2). This development accelerated in 2022 as Russia launched the war; among other factors, all deliveries of natural gas via Nord Stream 1 were stopped.

Figure 4.2 Gas price



Note: Futures on gas, Dutch TTF, for delivery next month.
Source: Macrobond.

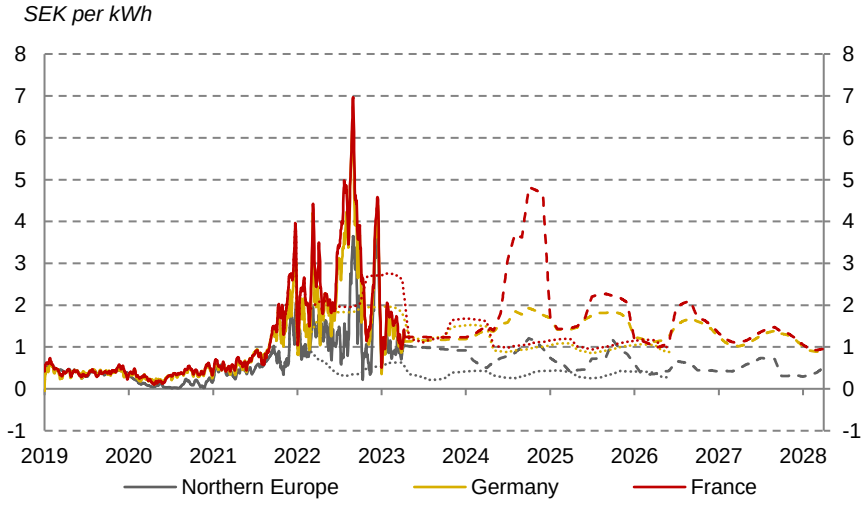
Many countries in Europe are dependent on gas to produce electricity, even though natural gas power plants are among the most expensive methods of generating electricity. The price of electricity in Europe is determined using the so-called marginal price model: the price for a given hour is set by the most expensive power generation method. Consequently, natural gas power plants often set the electricity price. The price of electricity therefore rose substantially when the gas became more expensive (figure 4.3).

[77] See CERRE (2022).

In 2022, the cessation of Russian gas deliveries was gradually compensated by growing deliveries of liquefied natural gas (LNG). Increased demand from Europe contributed to sharp increases in the price of LNG, meaning that European gas imports were up to eight times more expensive than usual.[78] Expansion and new construction of terminals will enable LNG to replace Russian gas in a few years. Liquid gas will however always be more expensive than gas transported via pipelines.[79]

There is a risk that the natural gas shortage in Europe will be even more palpable in the winter of 2023/24, even though gas reserves are relatively well-stocked at present.[80] Global demand for LNG is expected to rise, in part due to the end of Covid shut-downs in China. If the winter of 2023/24, in addition, is colder than the winter of 2022/23, gas prices may reach further new highs.[81]

Figure 4.3 Electricity prices before and after Russia's invasion of Ukraine



Note: Daily values. Solid lines show spot prices, i.e. before any taxes etc., up to and including 10 April 2023 on the power exchange. The figure also shows forward prices for delivery of electricity one month

[78] ACER (2022).
[79] Gas delivered in pipelines can only be bought by those connected to the pipeline. Since there are few buyers, those buyers have strong bargaining positions and pay lower prices. LNG sold from transport ships can be sold anywhere in the world, and therefore always commands a higher price.
[80] Reuters (2023).
[81] ACER (2022).

into the future. Dotted lines show the forward prices one week before Russia's invasion (17 February 2022). Dashed lines show the forward prices on 11 April 2023.
Sources: EEX, ICE and Nordpool via Macrobond.

Another factor that has contributed to high electricity prices over the past year is that many nuclear power plants in Europe have not been operating at their normal productive capacity, chiefly due to planned maintenance and repairs.[82] In addition, the ever-warmer climate has meant that water used to cool nuclear power plants in France has been too warm at times to generate electricity at maximal capacity. Warm weather on the continent has also had a negative impact on hydroelectric power generation. Drought and scant rainfall have meant that reservoirs have not been refilled, limiting the production of electricity. Since the climate factors that have affected nuclear power plants and hydroelectric power in Europe can be expected to continue, or worsen, it is probable that productivity in these types of production will fall in coming years.

There have been problems with nuclear power generation in Sweden as well. The largest shortfall resulted from an inability to start the Ringhals 4 reactor, which normally supplies around 5 per cent of Sweden's electricity production, after planned maintenance in August 2022. Instead, the reactor was offline until the end of March 2023.

How prices will develop in the future cannot be predicted with any great degree of certainty. Current forecasts indicate that the electricity price will stay relatively high in the coming years, compared to the 2010s. This is not least the case in Germany and France, where the market believes that the high electricity prices of this past winter will be repeated in the winters of 2023/24 and 2024/25 (figure 4.3). In the Nordics, prices are also expected to remain high during the winter 2023/24, although lower than the winter of 2022/23. Afterwards, the price is expected to sink to levels that are considerably lower than 2022 and 2023, but higher than the years before 2021.

In the longer term, increased electricity use by European industry will be an important factor that keeps prices at an elevated level.[83] The climate transition will require electrification, and total energy use is expected to double in Europe and Sweden by the middle of the

[82] The EU produced 70 TWh less electricity from nuclear power for the first eight months of 2022 compared to 2021. In 2021, around 700 TWh of electricity were produced from nuclear power in the EU (Bruegel, 2022).
[83] Svenska kraftnät (2022a).

century.[84] In northern Sweden, estimates indicate, among other things, that the production of fossil-free steel will require considerable amounts of electricity. Growth in electricity production is expected to fall short of growing demand, resulting in higher prices. In a reference scenario from 2020, the European Commission estimated that total electricity production within the Union will increase by 20–30 per cent by 2050.[85] Estimates of this nature are very sensitive to the assumptions that are made, but in the case of Sweden, the most optimistic scenario shows an increase in production by up to 70 per cent.[86] As noted above, there are also reasons to believe that the warmer climate, in particular on the continent, will have a negative impact on European nuclear and hydroelectric power generation, which the Commission's scenario does not take into account.

4.1.2 Different yet interconnected markets

The electricity price peaks at the same time all over Europe, but at different levels. If there were no limitations to transmission between countries (or between electricity areas within countries), all European electricity would be priced on a common market and, in principle, the same price would apply everywhere.[87] In reality, there are limitations to transmission, limiting how much power can be transmitted in existing transmission lines, both within and between countries. When the grid operates at maximum capacity, electricity can no longer flow freely, resulting in local markets. On markets where there is relatively large production compared to demand, the price of electricity will be lower than on markets with low production and high demand. Limitations on the transmission between countries is one important reason for prices being lower in Sweden than on the continent. Electricity prices amounted, on average, to EUR 235 per MWh in Germany, to EUR 276 per MWh in France, and to EUR 136 per MWh

[84] The Swedish Fiscal Policy Council (2022).
[85] The European Commission (2020).
[86] Svenska kraftnät (2021).
[87] Transmission of electricity over long distances also results in power losses, which may give rise to different prices even if the transmission capacity is not a limiting factor per se.

in the Nordics. In Sweden, the average price in 2022 was EUR 120 per MWh (SEK 1.3/kWh).[88]

In Sweden, there are also limitations to transmission within the country. Sweden is divided into four electricity price areas, from area 1 in the north to area 4 in the south. The four electricity areas are interconnected by the grid, which is owned by the state enterprise Svenska kraftnät (SVK). More electricity is produced than consumed in electricity areas 1 and 2 , while the reverse is true for areas 3 and 4 (table 4.1).

Table 4.1 Production and consumption of electricity in 2022 (2021)

Terawatt hours

	SE1	SE2	SE3	SE4	Total
Hydro power	22,4 (22,1)	38,6 (38,8)	7,5 (11,4)	1,0 (1,3)	69,6 (73,6)
Nuclear power	0,0 (0,0)	0,0 (0,0)	50,1 (51,4)	0,0 (0,0)	50,1 (51,4)
Solar and wind power	5,5 (4,6)	14,0 (10,8)	9,4 (8,5)	5,3 (4,2)	34,2 (28,1)
Other thermal power	0,2 (0,2)	1,0 (1,1)	5,2 (5,4)	1,5 (1,6)	7,8 (8,3)
Total	28,2 (26,9)	53,6 (50,7)	72,2 (76,7)	7,9 (7,1)	161,8 (161,4)
Usage[1]	11,1 (10,7)	15,4 (15,4)	80,5 (85,9)	21,9 (23,9)	128,9 (135,9)
Net export	17,1 (16,2)	38,2 (35,3)	-8,3 (-9,2)	-14 (-16,8)	32,9 (25,5)

Note: [1] Including grid losses. SE1–SE4 refer to electricity areas. Figures for 2021 in brackets.
Source: Svenska kraftnät.

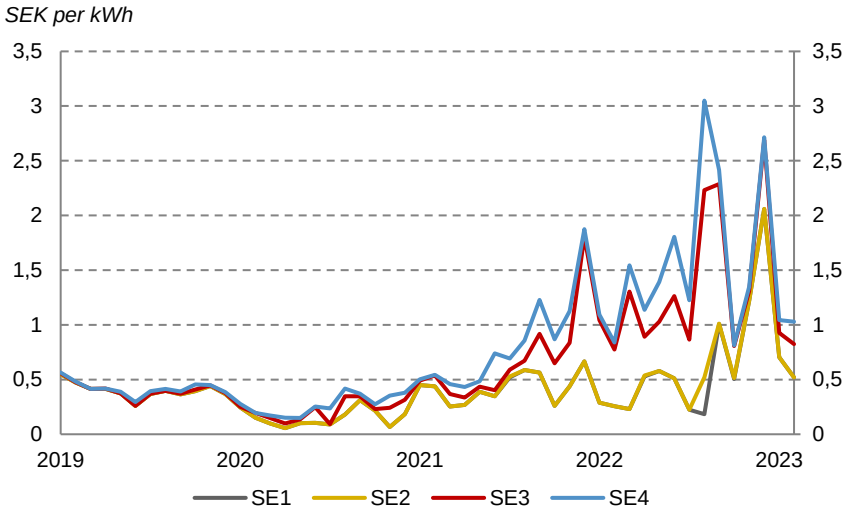
The grid in Sweden does not have enough transmission capacity to equalise prices between electricity price areas during peak hours. This results in oversupply in northern Sweden, keeping prices down, and excess demand in southern Sweden, pushing prices up (figure 4.4). These price differences entail that 'congestion rents' arise for SVK (in-depth box 4.1).

[88] EEX, Nordpool and the Swedish Energy Markets Inspectorate via Macrobond. The figures refer to spot prices on the power exchange, i.e. before any taxes etc. The figure for Sweden is calculated by weighting consumption by the annual price in SEK for each electricity zone. The Swedish price in SEK, together with the average exchange rate, gives the price in EUR.

In electricity price area 4, the average spot price has increased from SEK 0.4 per kWh in 2019, to SEK 1.6 per kWh in 2022. The corresponding increase in area 1 was from 0.4 to 0.6 SEK/kWh. During the winter, as northern Sweden experienced cold weather and hydroelectric power plants struggled with ice, the price has been over SEK 2.0 per kWh, even in electricity price areas 1 and 2 (figure 4.4).

The largest differences were recorded in the summer of 2022. Between July and August, the price of electricity in area 4 rose from SEK 1.2 per kWh to SEK 3.1 per kWh; in August 2021, the price was SEK 0.9 per kWh. In August 2022, forecasts for the winter indicated that the average spot price (i.e., excluding VAT and fees charged by electricity traders) of electricity in the Nordics would reach SEK 4 per kWh during the winter months (figure 4.5).[89]

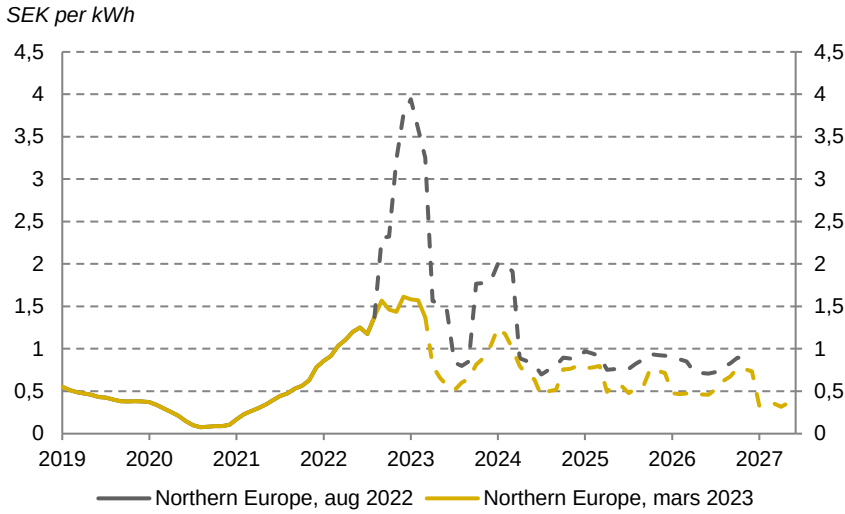
Figure 4.4 Electricity prices in the four electricity areas in Sweden



Note: Monthly average. Figures refer to spot prices on the power exchange, i.e. before any taxes etc.
Source: Nordpool.

[89] Source: National Institute of Economic Research (2022).

Figure 4.5 Forward prices in the Nordics, August 2022 and March 2023



Note: Monthly average. Figures refer to spot prices on the power exchange, i.e. before any taxes etc. Dashed lines are forward prices.
Source: Nordpool and ICE via Macrobond.

A record high volume of electricity was generated in Sweden in 2022, and production was considerably higher than total consumption. The latter is typically the case. As is shown in table 4.1, Sweden exported a considerable portion, around 20 percent, of its total electricity generation in 2022. Even so, electricity prices still rose as high as they did, as described above, due to the country's interconnection with the European market. As long as the transmission to the continent is not operating at maximum capacity, we find ourselves on a European market where the balance between supply and demand in Europe sets the price in Sweden.

High electricity prices have resulted in unexpectedly high profits for energy producers and grid operators. In Sweden, SVK is the primary beneficiary of this surplus in the form of congestion rents, of which SEK 63 billion are available for support measures (in-depth box 4.1). Businesses that consume a lot of electricity tend to have long, fixed contracts with electricity producers, which has restrained the profits of

electricity producers.[90] Still, some of the windfall has benefited electricity producers, in particular those operating in southern Sweden.[91]

In-depth box 4.1 Where do congestion rents come from?

Svenska kraftnät (SVK) equalises surplus electricity production in northern Sweden and production deficits in southern Sweden by transmitting electricity to the south. If the supply of electricity is high in northern Sweden and the grid transmission is operating at maximum capacity, prices there are pushed downwards. Transmission from the north operating at maximum capacity constrain supply in southern Sweden and causes prices there to rise. When electricity is sold at a higher price than it was purchased, an arbitrage gain arises that flows to SVK. The gains that flow to SVK are called congestion rents or bottle-neck revenue.

Congestion rents amounted on average to SEK 2 billion per year between 2011 and 2020. Due to a reduced supply of cheap electricity production in Europe and thereby a higher electricity price in southern Sweden, there have been substantial differences in price within Sweden since the end of 2021 (figure 4.4). Therefore, the congestion rents flowing to SVK have become unusually high: in total, SEK 22 billion in 2021 and SEK 69 billion in 2022. Of these, SEK 66 billion were generated by capacity limitations in Sweden, mainly between electricity price areas 2 and 3, while the remainder stemmed from capacity limitations in the transmission to other countries. SVK reports that SEK 63 billion are available for use in support schemes.[92] SVK plans to use expected future congestion rents to expand the grid and reduce grid rates, among other things.[93]

Congestion rents are primarily used to expand transmission capacity within the country. Improved transmission capacity between northern and southern Sweden will result in lower electricity prices in southern Sweden, and higher prices in northern Sweden. As a whole, though, prices will be lower in the country. Between electricity areas 2

[90] For example, the underlying net operating income for Vattenfall, a producer of more than 100 TWh of electricity, only increased by SEK 6 billion between 2021 and 2022 (Vattenfall, 2023).
[91] In Sweden, high electricity prices have prompted proposals for two new taxes: a temporary tax on extraordinary profits of certain companies in 2023 (Govt Bill 2022/23:20) and a temporary tax on surplus income for certain electricity producers (Govt Bill 2022/23:58). However, tax revenue from these two taxes are estimated to be small in comparison to the congestion rents.
[92] SVK (2023a).
[93] SVK (2023b).

and 3, where most of the congestion rents are generated, SVK has expanded transmission capacity from 6,900 MW in 2013 to 7,300 today. The forecast is that capacity will increase to 9,600 MW by 2034. Section 4.2 describes how funds from congestion rents may be used.

4.1.3 Measures to counteract high electricity prices

To counteract the high electricity prices, it is possible to take measures both to increase electricity production (increased supply) and improve the efficiency of electricity use (reduced demand).

The supply of electricity is difficult to affect in the short term. Permit processes and construction times mean that increasing production takes time. Consequently, the fundamental reason for the past year's increase in electricity prices in Europe, i.e. the cessation of gas imports from Russia, will continue to affect the supply of electricity several years into the future. The measures that can be taken in the short term include postponing the closures of nuclear power plants and to restart dormant electricity production. SVK has, for example, chosen to procure capacity from combined heat-and-power plants in Gothenburg and Malmö.[94] There are better opportunities to affect supply in the longer term. On a five-year time-scale, land-based wind power has the greatest potential; over a ten-year period, there may be new offshore wind farms and possibly even small modular nuclear reactors.[95]

Reducing the demand for electricity is the best way to affect prices in the short term. The marginal price model means that a lower electricity consumption, reducing the need for the most expensive methods of electricity production, can have a considerable impact on the price. Even small decreases in demand can have large effects. Studies show that for every percentage point that electricity consumption is reduced in Europe, the spot price of electricity falls by around EUR 12 per MWh in southern Sweden, corresponding to around SEK 0.17 per kWh lower electricity prices for households, including VAT.[96] The

[94] This measure improves transmission capacity between electricity areas, leading to lower electricity prices.
[95] Wråke (2023).
[96] Energiforsk (2022).

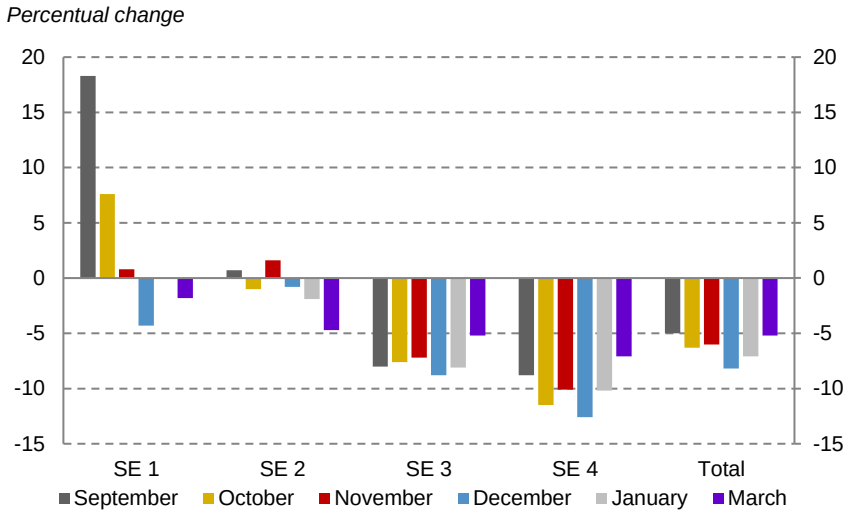
effect may be even larger during peak hours of electricity demand.[97] A reduction in electricity consumption in southern Sweden, but not the rest of Europe, would have about half as large an effect on electricity prices in southern Sweden.

With this in mind, the EU resolved in the autumn of 2022 that all countries shall reduce their electricity consumption by at least 5 per cent during the peak hours, i.e. when consumption and prices are at their highest.[98] In addition, it was decided that all countries shall strive toward reducing their electricity consumption during the period December 2022 to March 2023 by at least 10 per cent compared to the corresponding period 2017–2018.

In Sweden, the Swedish Energy Agency launched a campaign titled "Every kilowatt hour (kWh) counts" to reduce consumption. The aim of the campaign was for everyone in Sweden to contribute to moderating the electricity price, by reducing their consumption. Swedish electricity consumers have reacted to the high electricity prices and to the encouragement to reduce their consumption (figure 4.6). Compared to the same month in the previous year, total electricity consumption fell by 5 per cent during the months with the smallest reduction, and by 8 per cent in December, the highest reduction.[99] Consumption has decreased even more during the peak hours, i.e. weekday mornings and afternoons. The reduction in consumption has primarily been concentrated to southern Sweden. Whether this reduction is due to permanent improvements to efficiency (such as new heating systems) or to temporary savings (e.g. lower in-door temperatures) is not yet known.

[97] During peak hours when consumption is at its greatest, the most expensive methods of generation must also be used, resulting in a high electricity price. Reducing electricity consumption at the peaks means that the most expensive forms of generation are not needed and that the electricity price is lower. Combined with reduced consumption, this can have a substantial effect on electricity costs.
[98] Council Regulation (EU) 2022/1854.
[99] For September 2022, Svenska kraftnät reported on the reduction in consumption broken down into households and businesses, but ceased doing so as their calculations were too uncertain.

Figure 4.6 Electricity consumption 2022/23 compared to the same month 2021/22



Note: The figures are temperature and calendar corrected by Svenska kraftnät. SE1–SE4 represents the four electricity price areas in Sweden.
Source: Svenska kraftnät.

Financial support for households and businesses

Every country in the EU has introduced measures to support households and business, e.g. by lowering taxes on energy or introducing transfers. In Europe, the support payments have totalled over EUR 650 billion since energy prices began to rise in the autumn of 2021 (figure 1.8). Malta, Slovakia and Germany have offered support payments in excess of 6 per cent of GDP, while supports in Cyprus and Finland comprise to less than 1 per cent of GDP. The Swedish energy support payments, including fuel support, amount to around 1.3 per cent of GDP, or around SEK 80 billion, of which about half has gone to households and half to businesses.[100]

It is difficult to compare the scale and design of support schemes in different countries. In part, the way that the state is involved in the production and distribution of electricity varies between countries. Moreover, the subdivision within and between countries into different electricity price areas affects the distribution of income between

[100] Refers to electricity support that has been paid or decided up to and including April 2023, as well as tax reductions on fuels in 2022 and 2023.

producers and distributors. It also depends on the dominant form of heating used; the extensive use of gas for heating in Germany explains the substantial support paid for gas costs. Taken together, the differences in the level of support paid by different countries can be largely explained by structural differences, even if political considerations and the capacity of public finances certainly also plays a role.

4.2 Regulations governing electricity support schemes

The way that electricity support schemes are designed in different countries is affected by applicable regulation, not least on the EU level. In Sweden, as previously mentioned, a large portion of the support is financed by funds from SVK's congestion rents. For that reason, the design of the support schemes must take into account the EU regulations governing how this type of funds may be used: the Regulation on the internal market for electricity on the one hand, and the emergency intervention regulation that was adopted after Russia's war of aggression against Ukraine. In Sweden, the Swedish Energy Markets Inspectorate (Ei) is the authority which, on the basis of these rules, may approve how SVK uses congestion rents. In addition, the support schemes for businesses must comply with EU rules on state aid; those rules have also been temporarily amended due to the war. These regulations have been of crucial importance in determining the design of electricity support schemes for households and businesses. If instead the support schemes had been financed from the budget, a partly different set of rules would have applied, while the support payments would also have been covered by the fiscal framework. We will return to this point later on.

4.2.1 EU rules define the framework

Congestion rents arise because of insufficient grid capacity and an imbalance between where electricity is produced and where it is consumed (in-depth box 4.1). SVK's use of congestion rents is regulated by the EU's Regulation on the internal market for

electricity.[101] The regulation stipulates that congestion rents, in the first place, shall be used for measures to maintain or increase transmission capacity between electricity price areas. Once these purposes have been sufficiently fulfilled, then the congestion rents may also be used to lower network tariffs and thus to benefit consumers.

In May 2022, in the light of high electricity prices, the European Commission made an announcement opening up for broader use of congestion rents, and on 6 October, the Council of Ministers adopted the emergency intervention regulation.[102] Starting on 1 December 2022 and applying until the end of 2023, the regulation allows for the use of excess profits from congestion rents (revenues that exceed what SVK requires to finance expansion of transmission capacity) to finance schemes to support the final consumers of electricity, i.e. consumers purchasing electricity for their own use. If a country opts to use congestion rents to finance support schemes for final consumers, the Regulation stipulates that these funds be used in a targeted manner to finance support measures for customers to soften the impact of high electricity prices.[103] This need not be cash support, but could also include support for energy-saving measures or for investments in renewable energy, energy efficiency and reductions of CO2 emissions. The regulation does not provide an exhaustive list of the measures that are allowed, but only provides examples.[104] The primary concern is that the measures shall soften the effects of high electricity prices on the final consumers.

The measures must meet certain requirements. According to the regulation, they must be clearly defined, transparent, proportional, non-discriminatory and verifiable.[105] The support must also not work against another part of the same regulation, which states that member states shall strive to reduce their electricity consumption by 10 per cent.

Alongside EU regulation of the electricity market, there are also rules on state aid that aim to ensure that state aid to businesses or industries does not distort competition within the EU. A Member State may not subsidise businesses or industries to gain competitive advantages vis-a-vis other EU Member States. Measures that apply

[101] Council Regulation (EU) 2019/943.
[102] Council Regulation (EU) 2022/1854.
[103] EU 2022/1854, Article 10.1.
[104] EU 2022/1854, Article 10.4.
[105] EU 2022/1854, Article 10.2.

equally to all businesses, such as a reduction in the corporate income tax, are typically not considered state aid. Any measure that may comprise unlawful state aid must be approved by the European Commission before implementation.

State aid rules have also been temporarily changed due to Russia's war of aggression against Ukraine, and on 23 March 2022, the European Commission decided to temporarily permit broader forms of state aid. The temporary rules were initially to apply until the end of 2022, but were extended in November, applying until the end of 2023. The maximum amount that could be disbursed to any individual business was raised to EUR 2 million. The rules stipulate, among other things, that support for businesses that have been affected by high electricity prices are not to be considered state aid insofar as they are generally applied, e.g. as a tax reduction.[106] SVK considered that the model for electricity support schemes they had proposed in November was sufficiently general that a state aid review of the model would not be necessary. Ei, however, proposed such amendments that the Government made the assessment that the model needed to be reviewed under state aid rules, and that it would probably not be approved by the European Commission once reviewed. Therefore, SVK was given a new instruction that expressly required that the EUR 2 million limit of disbursement to any individual business must be respected.[107] The Government then reviewed the proposal before they, in April, sent the proposal to the European Commission for approval.[108] The Government also decided on support for electricity-intensive businesses, which on 16 February were approved under the state aid rules by the European Commission (see appendix 4).

[106] The European Commission (2022/C 131 I/01), paragraph 23, states that "Measures targeting commercial energy consumers do not constitute State aid, provided such measures are of a general nature. Such non-selective measures can, for example, take the form of general reductions in taxes or levies, a reduced rate to the supply of natural gas, electricity or district heating or reduced network costs."

[107] The extended state aid rules are not the result of a decision by the EU Council of Ministers, but have taken the shape of an announcement by the Commission. This is not binding in the same way as a regulation, but should instead be seen as a guideline describing what the Commission would approve as part of a state aid review.

[108] Before the Government submitted an application to the European Commission about the support for businesses, they made an adjustment to exclude all companies which had fixed the price of their electricity consumption prior to the support period, and which only had contracts that were in effect throughout the support period. At the end of April, the European Commission have not yet processed the application. The assessment of the Government is, however, that the scale of the support, at SEK 29 billion, is not materially affected, indicating that few companies are affected by the adjustment.

4.2.2 Electricity support from the budget or from congestion rents?

Congestion rents that flow to SVK are accounted for as a debt to electricity consumers. These funds are not a form of profit for SVK but are, as presented above, to be used in a way that benefits electricity consumers, typically through investments in the grid's transmission capacity. The congestion rents are not recognised as an income to the Government budget, but are placed in an account with the Swedish National Debt Office (RGK), and therefore affect the central government borrowing requirement. Payments of congestion rents to electricity consumers do not fall under the expenditure ceiling. In the national accounts, however, the electricity support is recognised as a taxation of the private sector by the state, and as a transfer from the state to households and businesses when the support is decided, meaning that the effect on net lending is zero.[109] Thereby, the electricity support does not affect any of the budgetary policy objectives. Of course, even if the support does not affect the budgetary policy objectives, it still affects the economy, as discussed in chapters 2 and 3.

The temporary rules governing how surplus income from congestion rents may be used offer an opportunity, but no duty, to pay out these funds to electricity consumers.[110] The first electricity support for households, in the spring of 2022, was designed before the emergency intervention regulation was in place, and was not associated with congestion rents. It was paid out via the central government budget, using an extra amending budget. The support to electricity-intensive businesses is also financed via the central government budget.[111]

How the support is financed – via congestion rents or via the central government budget – affects both how it might be designed and what the process for deciding on support looks like. If the support is financed using congestion rents, it must be designed in accordance with the emergency intervention regulation, which is not necessary if

[109] This principle was introduced in February 2023 and is not used in the 2023 Budget Bill (see in-depth box 2.1).
[110] EU 2022/1854, Article 9, paragraph 1.
[111] It was however mentioned in the 2023 Budget Bill that the government should assess the possibility of financing that support scheme with congestion rents. In April 2023, the government submitted an application to SVK to use congestion rents to finance that support, but SVK had not yet responded at the time this report was printed.

support for households and businesses is paid via the central government budget.[112] Since SVK retains control of the congestion rents, and the government may not directly govern SVK, the support must also be designed by SVK. The process for deciding on electricity support from congestion rents therefore entails that the government first submit an instruction to SVK to design a support; then that SVK applies to the Swedish Energy Market Inspectorate, Ei, for the proposed use of these funds; that Ei then tests whether the support is compatible with the EU rules on the electricity market; and finally, that the government issue a regulation on the support. The government may thus affect the design of the support, in part by governing the instruction to SVK, and in part via the regulation, but it is not directly involved in the design of the support model.[113]

A support financed by the central government budget, on the other hand, is designed by the Government directly. The Government has a greater capacity than SVK to prepare the issue, and has the liberty to consider e.g. the distributive effects of the support scheme. Therefore, the way that the support is financed is not merely a budgetary issue, but also affects how the support scheme can be designed. The support scheme for electricity-intensive businesses, which was developed by the Government independently of SVK, show that the Government has considerable abilities to independently design support schemes.

There are some limitations for the Government. One limitation is that the Government cannot request SVK's surplus congestion rents, like an extra dividend to the state. Another limitation determines how much of SVK's funds can be retained in an account with RGK for future investments. Ei conducts an annual review of the way SVK uses its congestion rents. There is no established practice relating to Ei's position if SVK wished to place a larger amount – say, SEK 50 billion – with RGK for a period of several years, and thereby have to borrow less money for the planned investments of over SEK 100 billion over the coming decade.

[112] Support from the central government budget must however comply with EU rules on state aid.

[113] The support for households for the period November–December 2022 had a ceiling of 18,000 kWh. This ceiling was not included in SVK's model, but was added by the government in the regulation SFS 2022:1872.

4.3 The scale and design of the electricity support schemes

In chapter 3, we emphasised that the electricity support schemes are merely one way to support households in the uncertainty prevailing in 2022, among several ways. Different support schemes feature different effects on the levels of activity in the economy, its long-term development potential and distribution of income. Government support to soften temporarily increased costs also raise more specific questions. This applies not least to electricity support schemes, as the scale and design of these schemes may affect the propensity of consumers to save electricity or to invest in their own electricity production, which in turn may have substantial effects on future electricity prices. In this section, we will now discuss the scale and design of electricity support schemes from these points of view. There are key differences between the support schemes for households and that for businesses, and we will first discuss the support for households.

4.3.1 Support for households

In 2022, and in 2023 thus far, there have been three rounds of Government decisions on electricity support for households made by the current and previous Government.[114] Electricity price areas 3 and 4, in southern Sweden, have received more support than areas 1 and 2 in northern Sweden. This is because two of the three support schemes entailed larger support the higher the price in each area rose above a common reference price; the higher electricity prices in southern Sweden have therefore entitled consumers to larger support. A typical household in electricity price area 4 has received a combined SEK 27,000, while a typical household in the two areas in the north of the country have received around SEK 9,000 (table 4.2).

[114]See appendix 4 for a closer description of the design of the support schemes.

Table 4.2 Electricity support for households

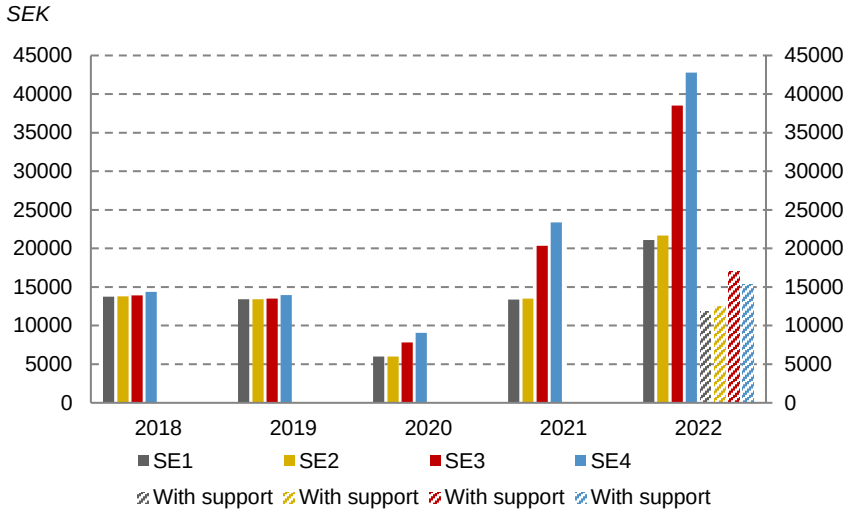
	Area 1	Area 2	Area 3	Area 4
Electricity support 1	6 000	6 000	7 000	7 000
Electricity support 2	0	0	10 000	15 800
Electricity support 3	3 240	3 240	4 536	4 644
Total	**9 240**	**9 240**	**21 536**	**27 444**

Note: *Electricity support 1*, assuming a consumption of 2,000 kWh per month, Dec 2021–March 2022. Entitled to support of maximally SEK 6,000 (area 1 and 2) and SEK 7,000 (areas 3 and 4), respectively. *Electricity support 2:* The electricity price in areas 1 and 2 was below the reference price, and thus no support was paid. Support of SEK 0.5 (0.79) in area 3 (4), assuming consumption of 20,000 kWh in Oct. 2021–September 2022. *Electricity support 3:* Electricity price areas 1 and 2 received SEK 0.9 per kWh, areas 3 and 4 received SEK 1.26 and SEK 1.29, respectively, assuming a consumption of 4,500 kWh in Nov–Dec 2022. 80 per cent of consumption entitled to compensation. See appendix 4 for a closer description of the design of the support schemes.
Source: Own calculations.

the cost of an electricity consumption of 20,000 kWh per year, including and excluding support in 2022, is compared to the corresponding cost in 2018–2021 in figure 4.7.[115] The aim is to show how the combined electricity support schemes have affected the net cost in comparison to previous years. As the figure shows, electricity support has more than neutralised the increased costs for electricity consumption in electricity price areas 1 and 2. Including the support, the total cost was lower in 2022 than in previous years, with the exception of 2020 when electricity prices were very low, in part due to the pandemic (grey and yellow bars). For areas 3 and 4, the electricity support schemes have also reduced costs considerably, so that the costs are in line with 2018–2019 albeit higher than in 2020 (red and blue bars).

[115] These figures include the cost of electricity trading agreements, including VAT, but not the network fees and energy taxes, nor the VAT thereof. The calculations do not capture that network fees have increased as the cost of grid losses has risen.

Figure 4.7 Cost of electricity consumption, 20,000 kWh



Note: Assuming an annual consumption of 20,000 kWh, distributed monthly according to data from the Stockholm Chamber of Commerce. This level of monthly consumption has been multiplied by the monthly variable rate tariff (households) in each electricity price area. The price includes all costs for the electricity trade agreement, including VAT. The network fee and energy taxes, including VAT on these, are not included. The total electricity support presented in table 4.2 have been subtracted by the series "With electricity support". Two of these support payments were made in 2023, but they have been subtracted from the electricity cost for 2022.
Sources: The website of the Swedish Energy Market Inspectorate (16 February 2023), the Stockholm Chamber of Commerce (2022) and own calculations.

Support for households total SEK 36 billion and have thus resulted in costs for electricity consumption barely increasing, or even decreasing, compared to 2018–2019.

As we discussed in chapter 3, there were reasons to offer financial support for households given the heavily increased costs and the uncertainties that prevailed in 2022. Normally, the Government and the Riksdag decide on how transfers to households shall be designed, in terms of scale as well as distribution. In the situation prevailing in 2022, however, with high congestion rents and temporary EU regulations, it was partially understandable that the Government chose to finance support schemes with congestion rents. As presented in the previous section, it is the duty of Ei to annually assess SVK's handling of congestion rents given EU regulations, and Ei might have requested that parts of the congestion rents would be paid out to households, regardless of the Government's instruction.

It is the view of the Council, however, that the total support for households was too large, that the design in certain cases was deficient and that repeated support entails considerable risks. It should, with the approval of Ei, have been possible for SVK to retain more of the congestion rents and thereby, to a greater extent, avoid debt financing for its expansion of the grid in the coming decades. The government could have formulated its instruction to SVK in this direction. This is even more relevant considering the support for businesses, which we will discuss below.

A smaller electricity support scheme would also have been in line with the Council's principal stance, that support to soften the effects of high prices in specific markets should be avoided if possible. There are several reasons for this. The price on a market serves as a signal to the economic operators on that market. For example, high prices contribute to electricity consumers reducing their consumption, which limits the increase in price and reduces the risk of electricity shortages. Support may also reduce the propensity of consumers to maintain their own buffers in order to meet temporary increases in costs. It is particularly problematic when support schemes are repeated. Repeat support increase the risk that households and businesses come to expect support in more areas, instead of making their own preparations for difficult circumstances. Support schemes also risk leading to a greater degree of short-term policy thinking, inducing political parties to outbid one another to soften effects in the short term without taking the long-term consequences into account.

It is therefore of central importance that electricity support schemes are designed so that electricity consumers still interact with the market price for electricity. This leads both to lower demand and to the implementation of energy-efficiency measures. Energy-efficiency measures also reduce demand in the long term, mitigating the risk of future electricity shortages and spikes in prices.[116] Unlike many other European countries, none of the Swedish electricity support schemes have featured a price ceiling above which the state would assume the costs. In the Council's view, this is a good thing.[117] The price which electricity consumers have had to pay has, therefore,

[116] See Roine (2022) for a discussion of how electricity support schemes may be designed to incentivise consumers to save electricity.

[117] Such a price ceiling means that, when the price reaches that level, consumers have sharply weaker incentives to reduce their consumption. It may also become very costly for the state, if consumption above the price ceiling is too large.

reflected the scarcity of electricity. Basing electricity support scheme 2 on a historical reference period, so that households did not receive support based on their current consumption, was also an advantage from this perspective.

It was however problematic that the reference periods were moved forward when the support was repeated, as in the case of support scheme 3. The scheme was announced on 10 January 2023 and was to be based on the consumption in November and December 2022. At the same time, the Government did not exclude the possibility of future support schemes for the coming months in 2023. This means that electricity consumers may have been given the impression that future support payments would be based on their consumption in, for example, January–February 2023; this risked weakening the incentives for consumers to keep their electricity consumption low during these months. Repeated support risks increasing expectations of future support, and in that way affect the expected price that consumers face. Thereby, repeated support may weaken the incentives to save electricity, and in turn contribute to higher electricity prices. Repeated support should therefore be avoided, but if they are introduced, the historical reference period should not be moved forward into the future.

The Council also believes that it would have been desirable to introduce some form of ceiling to the support for households, e.g. in the form of a maximum amount per exit point or per household, or a maximum level of consumption that would entitle the consumer to support. The support could also have been limited to the address where a given household is entered into the population register, and thus not been paid out for second homes.

In summary, it would have been both possible and desirable for the electricity support for households to be smaller. This is due both to reasons given in chapter 3 and for those reasons presented here, such as that households have been overcompensated and that the incentives to save electricity have been weakened. The level of activity in the economy and the purchasing power among particularly affected households could have been maintained using other means. This is also true if one considers that there are institutional restrictions of various kinds, e.g. concerning the payment of excess congestion rents. Since repeated support is problematic, *one* support scheme to support households during the winter of 2022/23 would have been preferable,

like the largest electricity support of SEK 17 billion (scheme 2) which was announced in the autumn of 2022. Given that three support schemes were adopted, it would have been appropriate to include a ceiling either for the amounts of the support or for the consumption entitling the consumer to support.

That the combined electricity support schemes were excessive is illustrated by support scheme 3, which was announced in January 2023 to compensate households for elevated electricity prices in November–December 2022. Electricity price areas 3 and 4 had already, in the autumn of 2022, been promised support (scheme 2) which aimed to soften the effects of the rising electricity prices. The electricity prices that then arose in November and December 2022 were then *lower* than had been forecast when scheme 2 was announced. It is therefore difficult to understand how the need for further support in these areas could be considered higher in January 2023, than when the second support scheme was announced. The design of the third support scheme meant that areas 1 and 2 were included as well (table 4.2), even though these two areas in northern Sweden did not experience any prolonged period of sharply elevated electricity prices (section 4.1, figure 4.4).

4.3.2 Support for businesses

There are several reasons why support schemes for businesses are considerably more dubious than supports for households. Businesses are normally able to transfer their costs to consumers, which was also the case in many industries in 2022.[118] The sale of goods and services in the private sector increased in 2022 by 1.3 and 3.9 per cent, respectively, while profit margins grew.[119] Taken together, it indicates that costs have been substantially passed on to consumers. Businesses can also be expected to have a buffer to ensure that unexpected costs do not threaten the survival of the business. In addition, businesses typically also have the ability to raise loans to bridge periods of weak liquidity, and during the year, businesses have had the option to defer tax payments (appendix 4).

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[118] NIER (2022b).

[119] NIER (2023a). According to the NIER (2022c, table 16), the profit share increased in 12 industries and decreased in 6 industries between 2021q2 and 2022q2. According to the NIER (2022d, table 13), the profit share in 2022q2 was higher than the average since 2000 in 15 industries while it was lower in 5 industries.

Moreover, it is relatively common among businesses that consume a lot of electricity to have long, fixed electricity contracts, meaning that sharp increases in prices have less effect in the short term.[120] For that reason, the general electricity support of SEK 29 billion means that some businesses, in particular heavy consumers of electricity, receive support in excess of the cost increase for their electricity consumption (in-depth box 4.2).[121] This could have been substantially avoided by combining a ceiling for electricity consumption, over which costs would have to be proven, with a cap no higher than EUR 2 million. The lower the ceiling, the more businesses would have to prove that their costs had increased. The administrative burden would not have had to be particularly large. For example, Ei's assessment was that their proposed ceiling of 3 million kWh would affect around 1,700 exit points.[122] If the cap was instead placed at 2 million kWh, the number of exit points would increase to around 2,700. This appears manageable, in particular compared to the administration required to pay support to businesses during the pandemic. The ceiling for support paid could also have been lower than SEK 20 million.[123]

Moreover, it should be noted that the emergency intervention regulation also opens up for special support to electricity-intensive businesses (section 4.2). It is naturally more difficult to fully pass on higher electricity costs to consumers, the larger the proportion these are of the business' total costs. Completely passing costs on to consumers would result in sharp increases in price, resulting in lower demand. Since the electricity costs of electricity-intensive businesses comprise a large proportion of their total costs, the buffers and options to defer tax payments may be insufficient. In that scenario, there is a risk that otherwise competitive businesses would be forced to reduce their activities sharply, or at worst cease trading, due to temporarily higher electricity costs. The Council therefore believes that the electricity support scheme for electricity-intensive businesses can be justified. This is particularly the case since businesses must prove that

[120] Dagens industri (2022). The fact that only a handful of businesses so far were granted the special support for electricity-intensive businesses, and that the application period was therefore extended, supports this hypothesis (Alltinget 2023). There does not appear to be any available statistics showing companies' contract terms for electricity.
[121] See Appendix 4.
[122] Since there are businesses that have multiple exit points, the number of affected companies could be somewhat lower.
[123] The ceiling for the support was set by the Government at SEK 20 million. The ceiling means that the total extent of the support scheme is SEK 9 billion lower than SVK's original proposal.

their costs have risen in order to receive this support. Potentially, the government ought to have considered as an alternative to introduce credit guarantees for electricity-intensive companies in need of liquidity loans.

The importance of the scale and design of the support schemes – whether for households or businesses – emphasises the government's responsibility in ensuring that the support schemes are fit for purpose. SVK and Ei prepare issues and consider relevant regulation within their areas of responsibility, but cannot be expected to account for socioeconomic considerations relating to e.g. ceilings on consumption or support payments. These are, fundamentally, political decisions to make. The government is responsible for the whole: for the compliance with regulation as well as for the economic and distributional effects of these measures. If support schemes should become relevant in the future, and have to go via SVK, the government should therefore take a more active role and formulate their instruction to SVK in such a way as to promote compliance and reflect the design which the government desires.

In-depth box 4.2 Occasionally weak connection between electricity costs and electricity support

The support for households and businesses, with the exception of the special support for electricity-intensive businesses, are calculated based on a recipient's electricity consumption for a previous period and the electricity price area in which the consumption took place.[124] However, the support was not associated with whether the individual consumer had variable- or fixed-rate tariffs, or the level at which this tariff had been.[125] In order to relate the support to the individual, final consumer's true costs, the recipients would have to apply for support and prove their costs. This has been seen as administratively too complex to be included in the support schemes.

On a national level, there is a connection between electricity costs and support, in the sense that most support was paid in southern Sweden, where electricity prices have been higher on average. On the level of the individual consumer and their actual costs, however, there is no association. Two electricity consumers in the same electricity price area with the same level of consumption will receive the same

[124] See appendix 4 for a closer description of the design of the support schemes.
[125] See appendix 4 regarding the connection with the type of electricity contract companies have.

support even if one of them, owing to fixed prices, have paid a low price and the other paid a high price. If the two consumers instead were located in different electricity price areas, they may receive different amounts of support, even if they consumed the same amount of electricity and paid the same costs. In the public debate, the electricity support schemes have often been presented as a repayment of a fee, but the fact that the support schemes do not take the individual consumer's costs into account means that that reasoning is flawed. It is more justified to consider the support as a template payment based on rules of thumb.

The association between costs and support is further weakened by the fact that support payments were not based on current electricity prices during the winter, but on the prices that prevailed during the reference period.

The support for electricity-intensive businesses, on the other hand, are based on the actual electricity costs of the individual beneficiary. It is primarily targeted at businesses across the country and is based on how much the electricity price increased, rather than the actual price. There is furthermore a cap on this support and it is not deducted from the general support for businesses.

4.4 Conclusions

As we concluded in chapter 3, it is easy to understand that support for households was associated with the development of electricity prices. The rapidly increasing electricity prices in 2022 were challenging, especially for households with thin margins. There may also have been an idea that this type of support could be rapidly implemented, thus functioning well from a stabilisation policy perspective as well. Our fundamental view is, however, that the Government should generally be very restrictive about compensating for price changes on various markets, and that there ought to be very good reasons for such interventions when they are carried out. This is particularly important on the electricity market, as consumers are incentivised to improve energy efficiency when they meet the market price. This reduces the demand for electricity and its price, in the short term as well as in the long term. The substantial and rapid increases in the price of electricity, the high congestion rents in 2022 and the EU regulations concerning the use of these rents, make it understandable and reasonable for the

Government to finance such part of these support schemes as are considered justified from a fiscal policy perspective, with congestion rents.

The largest support for households amounted to SEK 17 billion and was announced as forecasts indicated very high electricity prices for the winter of 2022/23. The Council is generally positively inclined toward the design of this support scheme; it was based on historical consumption, and consumers still interacted with the market price for electricity. However, we are of the opinion that the scheme should have included some form of ceiling on the level of support or consumption. As for the third support scheme for households, announced in January 2023 and based on consumption in November–December 2022, there are stronger reasons to be critical. In part, there had already been previous support implemented for that period, and in part, prices ended up lower than initially feared. Moreover, as the reference period was moved forward, there was a risk that households had a lower propensity to reduce their electricity consumption and invest in energy efficiency.

The overall assessment of the Council is that the support for households was too large, that the design was deficient in some respects and that repeated support schemes warped incentives. The consequences are that more electricity is used than would be desirable, and that prices are driven up. As a result of the three support schemes disbursing a combined SEK 36 billion, electricity costs after the support payments were lower than in a normal year in northern Sweden, and roughly in line with a normal year in southern Sweden. The electricity support schemes for households could have been limited; for example, a higher reference price or a smaller proportion of overall consumption could have been used as the basis for support. The support could also have been limited to the address where a household is entered in the population register, and thus not been paid for e.g. second homes. A smaller electricity support could have been supplemented with other fiscal policy measures (chapter 3).

The general electricity support schemes for businesses should have been substantially smaller. Businesses are able to pass costs on to their customers to a considerable extent. They have also been able to defer tax payments, and many companies should have been able to turn to the financial markets to weather temporary difficulties. In addition, major consumers of electricity typically have fixed contracts with

electricity providers, meaning that changes in the market price had little effect in the short term. One way of limiting the payments could have been to combine a consumption ceiling, above which a business would have to prove their actual increases in cost, with a maximum ceiling on disbursed amounts on EUR 2 million or less. The administrative burden of these ceilings would, provided that the ceilings were reasonably designed, have been manageable.

The limited support of SEK 2 billion for electricity-intensive businesses was more justified, however, as it could have been difficult to fully pass these costs on to customers down the line. To receive support, the electricity-intensive businesses also had to prove that their costs had risen – unlike the general support scheme. An alternative means of supporting all electricity-intensive businesses would have been to institute a system of credit guarantees for those companies that suffered liquidity problems.

The Council is of the opinion that support schemes, whether for households or businesses, compensating for high electricity costs should be avoided in the future. In the event that support schemes are still necessary, the Government should take a more active and direct role in determining the scale and design of these support schemes. The Government has considerable capacity to prepare proposals and apply the broader grip that was necessary. Above all, any support for businesses should, if possible, be designed so that only those businesses that have in fact suffered higher costs receive support. The Government should also review the ability of SVK to retain a larger portion of the congestion rents for future investments. This would give the Government greater abilities to use the budget to achieve a well-balanced economic policy.

The Council also believes that an evaluation of the actual effects of the support schemes should be carried out. For that reason, information about the volume of support received by each beneficiary, as well as the actual costs that were paid, should be made available.

In summary, the Council considers that there are substantial risks when the State provides general compensation for households and businesses during temporary changes in prices, whether this relates to the electricity market or in other areas. There are several reasons for this. By subsidising the price, the State weakens the incentives for households and businesses to mitigate price risks themselves. There is also a risk that such schemes counteract other, long-term political

objectives – in this case, to improve electricity efficiency as part of the climate transition.

Appendix 4: Design of electricity support schemes for households and businesses

This appendix describes the design of the three support schemes for households, the two schemes for businesses and the opportunity for businesses to apply for tax deferrals.

First support for households

The first support scheme for households was adopted by the Riksdag in February 2022, and was intended to compensate households for high electricity prices in December 2021–February 2022.[126] The support was tied to electricity compensation and was paid based on a defined ladder for consumption between 700 and 2,000 kWh per month. Any consumer with a consumption of 2,000 kWh per month or more was entitled to a total of SEK 6,000 for these three months. The scheme was then extended to also cover the month of March, albeit only in electricity price areas 3 and 4. The maximum support payment for that month was capped at SEK 1,000. In total, the support was therefore SEK 7,000 per household in electricity price areas 3 and 4.

The support was paid with a newly instituted budget appropriation and paid to the households via their electricity grid operators, by deducting the support amount from electricity bills. In total, the electricity support for December 2021–March 2022 amounted to SEK 9 billion.

Second support for households

The second support scheme for households was based on electricity consumption and the average electricity price during the period October 2021–September 2022. Support was paid for the difference between the prevailing price of electricity and a reference rate, set at SEK 0.75/kWh, multiplied by consumption at each 'exit point'. Unlike the support scheme in the spring of 2022, there was no binding cap on

[126] Govt Bill 2021/22: 113 and Govt Bill 2021/22:199.

the support paid to households.[127] In electricity price areas 1 and 2, the average electricity price remained below SEK 0.75 per kWh; for that reason, no support was paid in these areas. In areas 3 and 4, the average price was SEK 1.25 and 1.54 per kWh, respectively. The support therefore amounted to SEK 0.50 per kWh in area 3 and SEK 0.79 per kWh in area 4 (table A4.1).

The support was calculated based on figures known to the grid operators, so beneficiaries did not have to apply for support. Consumers could, by the same token, not refrain from receiving support either. The disbursement of the support was administered by Försäkringskassan, the Swedish social insurance agency, and was primarily conducted at the end of February 2023. The support amounted to a total of SEK 17 billion.

Table A4.1 The second support scheme for households

	Price	Reference price	Electricity support
Area 1	43	75	0
Area 2	46	75	0
Area 3	125	75	50
Area 4	154	75	79

Note: Based on consumption Oct. 2021–Sep. 2022. The price refers to the average price in each electricity price area for the period October 2021–September 2022; the reference price is the same for all areas, and the support was defined as the price less reference price multiplied by the kWh consumed.
Source: SFS (2022:1872).

Third electricity support scheme for households

The third support scheme was designed in the same way as the second scheme, but based on consumption and prices in November and December 2022 (table A4.2). Support was paid out for 80 per cent of consumption during these months. There was also a cap on the level of consumption that would be compensated, set at 18,000 kWh. The support amounted to SEK 10 billion. In total, households have therefore received electricity support of SEK 36 billion.

[127] Formally, there is a cap of 3 million kWh, but there were no households that reached this cap (SFS 2022:1872).

Table A4.2 The third support scheme for households

	Price	Reference price	Electricity support
Area 1	165	75	90
Area 2	165	75	90
Area 3	201	75	126
Area 4	204	75	129

Note: Based on consumption during November–December 2022. The price refers to the average price in each electricity price area for the period November–December 2022. The reference price is the same for all areas, and the support per kWh was defined as the price less reference price, being paid for 80 per cent of the actual consumption.
Source: SFS (2023:108).

The general support scheme for businesses

The general support scheme for businesses was principally designed using the same model as the second support for households, being based on consumption and prices for the period October 2021 to September 2022. However, the support scheme for businesses had to be tested for compliance with the EU state aid rules. The Government also instructed SVK to design the support scheme in compliance with the European Commission's publication on 9 November 2022 for a temporary crisis framework for state aid measures,[128] and to cap the support at EUR 2 million per business.[129] The support was capped by the Government at SEK 20 million. Before the Government submitted their application to the European Commission, they made an adjustment to the proposal to exclude businesses that had fixed their rates prior to the beginning of the support period and whose contracts remained in force during the support period. The Government estimates that the total support, of SEK 29 billion, was negligibly affected by this adjustment, indicating that very few businesses were affected by the adjustment. The European Commission's assessment was not yet complete at the time of printing this report, so the design of the scheme may yet change.

Businesses were required to apply to receive support and to show that they were registered for Swedish corporate taxation and free of any debts with the Enforcement Service. Businesses could apply for support from 30 May until 25 September 2023. The support was estimated to amount to SEK 29 billion.

[128] The European Commission (2022/C 426/01), point 2.1 a.
[129] Formally, support is capped per group, not per business.

Support for electricity-intensive businesses

In the 2023 Budget Bill, the Government also announced a special support scheme for electricity-intensive businesses. The support was estimated at SEK 2 billion and also financed by congestion rents.[130] This support is designed based on a different set of principles than the other schemes. A business is entitled to support if it is electricity-intensive, which is defined as a business whose electricity consumption amounts to at least 0.015 kWh per SEK of sales. The support is based on the company's actual electricity costs in October–December 2022, and is disbursed if these costs per kWh were more than 1.5 times of the company's average electricity price in 2021. Under the temporary state aid rules, the support may be paid for a maximum of 70 per cent of the level of consumption during the same months of 2021. The support comprises half of the qualifying costs, and support was paid only if that amount exceeded SEK 50,000. A company may be entitled to receive support from the general scheme as well as from the scheme for electricity-intensive businesses.

Tax deferrals

The Government proposed that the tax deferrals available to businesses facing liquidity shortages should be expanded and extended, from 12 February to 12 September 2023.[131] The deferrals are not directly tied to electricity prices, but the proposal to extend the deferrals was rooted in the high rate of inflation and high electricity prices. There had been options for deferrals earlier on as well, and these were used to great extent during the coronavirus crisis. The Government estimated that around 12,000 companies would utilise the expanded option for deferrals, totalling around SEK 16 billion in 2023. The deferred taxes are expected to be paid gradually over 2024–2027. The total effect on public finances is assessed to be negligible.

[130] The 2023 Budget Bill specifies that the support shall be financed by "bottle-neck income as a point of departure" and not affect public expenditure (the 2023 Budget Bill, p. 13). The bill also shows that SEK 2 billion are reported as an income in the budget, and that the support will be paid as an appropriation in expenditure area 24 (the 2023 Budget Bill, p. 77) In April 2023, the Government submitted an application to SVK to use congestion rents to finance the support scheme, but SVK had not yet answered this request by the time this report was printed.
[131] Govt Bill 2022/23:52).

5 Fiscal policy over the business cycle: 2002–2022

The Council's remit includes an assessment of whether fiscal policy has been well designed from the perspective of stabilisation policy. These assessments, which are included in all of the Council's reports, are adapted to the current situation and there are, in principle, always special circumstances that the report must take into consideration (chapters 2 and 3 of this year's report). To complement these annual assessments, there is a systematic analysis of the conduct of fiscal policy over the business cycle in a longer perspective. This chapter presents new calculations to shed light on this matter.

The role that fiscal policy takes in economic stabilisation has been increasingly discussed in recent years, both internationally and in Sweden. In the report for 2021, the Council emphasised that fiscal policy may have to play a greater role when the possibilities of monetary policy have been exhausted; there was an ESO report on this topic last year[132] and the Long-term Survey of the Swedish Economy, which is to be published at the coming year-end, deals with the same issue. In addition to the limitations of monetary policy, experiences from the pandemic and from Russia's war of aggression against Ukraine have shown that the role that fiscal policy has to play depends heavily on the type of disruptions that affect the economy, i.e. whether they derive from the demand or supply-side.

Ever since the 1970s, there have been recurrent discussions on the value and risks of using active fiscal policy over the business cycle. Fiscal policy risks being incorrectly timed due to too long lead times between identification of a problem and measures undertaken and when these take effect. Historical experiences from the same period show moreover that the political system can lead to a 'deficit bias' and weakening of public finances over time.[133]

The fact that fiscal policy may need to assume a role in stabilisation policy has to weighed against how well it is able to do this in practice.

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[132] Calmfors et al. (2022).

[133] Governments may take a short-term perspective and tend to conduct expansionary policy in recessions without exercising restraint during booms, leading a deficit on average. The reason for this may be a general belief that expansionary policy increases the government's chances of re-election; alternatively, it may be an attempt to make it harder for future, competing governments to conduct their policy. For a further discussion of this, see Calmfors et al. (2022).

Even if the reasoning in principle remains valid and experiences from the 1970s and 1980s should be taken into account, it is important to deepen the discussion and to give weight to how fiscal policy has been conducted in current institutional conditions. It is particularly important to take into consideration experiences since the fiscal policy framework was put into practice at the turn of the millennium at the same time as an institutional arrangement with an independent central bank focused on price stability was gradually established during the 1990s.

In order for fiscal policy to stabilise the economy, it should be *countercyclical*, i.e. expansionary in recession and contractionary in a boom. If the opposite applies, so that fiscal policy strengthens fluctuations in the economy, we refer to it as being *procyclical*. The fiscal policy framework aims, among other things, to counteract procyclical fiscal policy. In this chapter, we analyse how fiscal policy has related to the business cycle.

All economic policy aiming to even out the business cycle is based on economic forecasts and it is therefore important to differentiate between fiscal policy *intentions* based on the information available when the decision was made (ex-ante) and the fiscal policy *outcomes* (ex-post). In this chapter, we begin by analysing how the fiscal *stance* – the deviation of the fiscal balance from the surplus target – has related to the economic situation. We then analyse how the fiscal *impulse* – the change in the fiscal balance – has related to changes in the economic situation.

At the start of the chapter, we describe central concepts and figures used in the analysis.

5.1 Terminology

When fiscal policy is used for the purpose of stabilisation policy, it is intended to contribute to higher demand in a recession and lower demand in a boom. This can take place both through automatic stabilisers and through active decisions – referred to as discretionary fiscal policy.[134] We are particularly interested in isolating the effects of

[134]Automatic stabilisers refer to public income and expenditure that vary with the business cycle. These can primarily be found on the income side as most tax income (from wage income, capital gains and VAT) follow the business cycle. There are only a handful of public expenditures that are affected by the business cycle. These include, for example, unemployment benefits.

the discretionary fiscal policy after the fiscal policy framework has started to apply. The result including the automatic stabilisers is shown in appendix 5A.

5.1.1 Countercyclical fiscal policy

The discretionary fiscal policy is usually measured with the aid of the structural balance as a proportion of potential GDP. As the structural balance measures the fiscal balance corrected for the economic situation, it is a measure of how expansionary or contractionary fiscal policy is, once isolated from the effects of the automatic stabilisers.

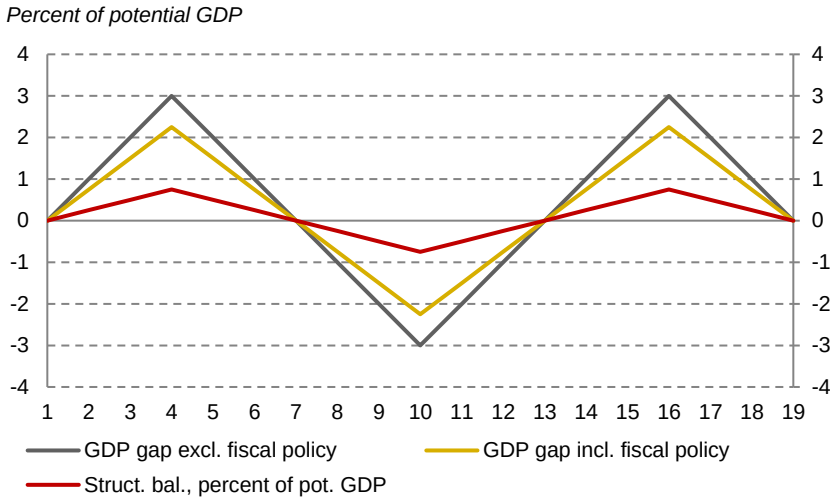
The underlying principle for countercyclical fiscal policy is illustrated in a simplified example in figure 5.1. We assume here that there is a balance target for the fiscal balance that entails that the fiscal balance should be zero over a business cycle. We further assume that fiscal policy is symmetrical and conducted in such a way that the structural balance is 1/4 of the assumed GDP gap at any given time, before taking into account any fiscal policy measures.[135] In a boom (positive GDP gap, grey line), fiscal policy is conducted that entails that the balance exceeds the target level (red line) which dampens the boom (yellow line; see footnote 135). The reverse applies in a recession; the recession is ameliorated by the balance being below the target level. Overall, a countercyclical fiscal policy means that both booms and recessions are dampened; the GDP gap when effects from fiscal policy are taken into account varies less over the business cycle compared with the GDP gap excluding fiscal policy.

This illustration has important implications for the analysis of the chapter; the more efficient fiscal policy is at stabilising the economy, the less the estimated GDP gap will be and thus the correlation between the GDP gap and the structural balance. A ”perfect” fiscal policy, from the perspective of stabilisation policy, means that the estimated GDP gap will be zero and thus the correlation with the structural balance also zero. We must therefore take into account that

[135] The structural balance, ss, is given by $ss = 1/4 \times y^E$, where y^E is the GDP gap excluding discretionary fiscal policy. The GDP gap that excludes discretionary fiscal policy is determined using the following correlation: $y^E = y^I - (\bar{ss} - ss)$, where y^I is the government's estimate of the GDP gap considering the fiscal policy, and $\bar{ss}$ is the target level for the structural balance. When the balance is below the target, $(\bar{ss} - ss) > 0$, fiscal policy is described as expansionary, meaning that $y^I > y^E$ (for further discussion, see section 5.1.2). Expansionary fiscal policy has thus made the GDP gap less negative (note that the structural balance is below the target level when the GDP gap is negative), contributing to stabilising the business cycle.

the structural balance affects the estimated GDP gap when we analyse how fiscal policy has been conducted over the business cycle.

Figure 5.1 Countercyclical fiscal policy: an illustration



Note: We assume here that there is a target for the structural balance to be zero over a business cycle. See footnote 135 on the GDP gap excluding and including fiscal policy respectively.
Source: Own illustration.

5.1.2 Expansionary, contractionary and neutral fiscal policy

We say that fiscal policy is expansionary, contractionary or neutral depending on how it is assumed to affect aggregate demand.[136] Furthermore, we differentiate between the (assumed) effect of fiscal policy on the level of aggregate demand in a particular year and the change in the same between two consecutive years. We study both in the empirical analysis.

The fiscal stance

To measure how expansionary or contractionary fiscal policy is, reference is made in the literature to the fiscal stance.[137] This refers to the effect of fiscal policy on the aggregate level of demand. In order to

[136] Common synonyms for *expansionary* and *contractionary* include *stimulating* and *tightening*, respectively.
[137] European Fiscal Board (2021) and IMF (1991).

be able to measure this, we take into account in the analysis the deviation of the structural balance from the surplus target.

We can again use figure 5.1 to illustrate these concepts. In period 5, the structural balance is higher than the target level. This might, for example, depend on public investments being lower than normal which has a contractionary effect on the aggregate demand, and thus on the GDP gap compared with if investments had been at a normal level. Correspondingly, the lower structural balance in period 10 has an expansionary effect on aggregate demand, for example, thanks to higher public investments than normal. It may be noted that in period 11, the structural balance is less negative compared with period 10 but still less than normal. Fiscal policy therefore still makes a positive contribution to aggregate demand in period 11 compared with a normal situation, even if fiscal policy is somewhat less expansionary than in period 10.

In-depth box 5.1 How deviations from a balance target affect aggregate demand

The level of a balance target does not normally affect long-term aggregate demand.[138] In the long term, monetary policy is assumed to maintain a level of demand that leads to full resource utilisation.[139] Furthermore, *Ricardian effects* lead to a change in target level having negligible effects on aggregate demand.[140] However, temporary deviations from a given balance target will have effects on demand in the short term.

Take figure 5.1 as an example. Assume that the balance target, in this case that the balance should be zero over a business cycle, is credible and that the balance is only affected by how the level of public investments changes over the business cycle. In period 10, the GDP gap before fiscal policy has been taken into account is -3 per cent (grey

[138] There are exceptions to this default assumption. A lower balance target that is used for investments and that increases productivity in the private sector may have lasting effects on GDP. See the next footnote for further exceptions.

[139] This does not apply if the neutral interest rate is so low that the central bank is unable to lower the policy rates sufficiently to maintain full resource utilisation. In this event, a lasting demand deficiency may arise. A lower balance target and thereby higher demand from the public sector may then increase demand for a longer period than normally (Blanchard, 2023). See section 6.2.

[140] If a higher (lower) balance target creates expectations for lower (higher) taxes in the future, the higher (lower) net lending may result in a lower (higher) private sector balance and leave aggregate demand unchanged. The empirical evidence for such *Ricardian equivalence* is not very strong, however; see Rachel and Summers (2019) and references therein.

line) and the structural balance is -0.75 per cent (red line). The public investments are thus greater than normal, which makes the recession milder (yellow line). In period 11, the structural balance is less negative, at -0.5. However, the public investments are still greater than normal, which means that aggregate demand is higher this period than if the public investments had been at a normal level. If instead the balance target had credibly been changed from 0 to -0.5 in period 11, the fiscal stance would have been less expansionary. This had come about through the Riksbank having to choose a higher interest rate path to eventually reduce private demand to the same extent as public demand had increased given the lower balance target.

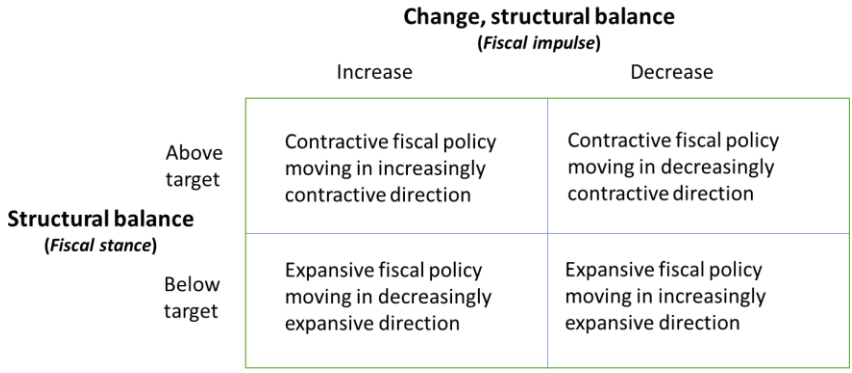
The fiscal impulse

When discretionary fiscal policy measures are undertaken in such a way as to affect the structural balance, the change in aggregate demand is normally affected between two consecutive years. We refer to this measure of the change in fiscal policy as the *fiscal impulse*.[141] If the fiscal policy measures are undertaken to strengthen the structural balance – for example, from -0.75 to -0.5 between period 10 and 11 in figure 5.1 – it has, applying Keynesian assumptions, a contractionary effect on the development of demand (change in the GDP gap) compared with if the measures had not been undertaken and the structural balance had remained at -0.75 per cent in period 11.

This example shows that consideration to both the level and the change in the structural balance are required to describe the discretionary fiscal policy over the business cycle. In period 11, the fiscal policy *stance* is still expansionary – the aggregate demand is higher compared with if the structural balance were in line with the budget target. The fiscal policy *impulse* in period 11 is, however, contractionary – in the absence of a strengthening of the structural balance, the aggregate demand would have been higher. Figure 5.2 illustrates the level and change concepts used in the chapter.

[141] The term is used by numerous organisations in Sweden as well, including NIER and the Government.

Figure 5.2 Fiscal policy concepts over the business cycle



Source: Own illustration.

Two useful figures

Before we consider the conduct of fiscal policy over the business cycle during recent decades, two figures are introduced which we will use in the analysis. They are based on figure 5.1. The first figure, figure 5.3a, illustrates how the fiscal stance has varied with the level of demand over the business cycle. The Y-axis shows the difference between a balance target (here: zero) and the structural balance. The X-axis shows the GDP gap excluding the effects of fiscal policy, i.e. the GDP gap which would have existed if the structural balance had coincided with the balance target at every point in time (footnote 135).

Given a countercyclical fiscal policy, observations will fall in two of the four quadrants:

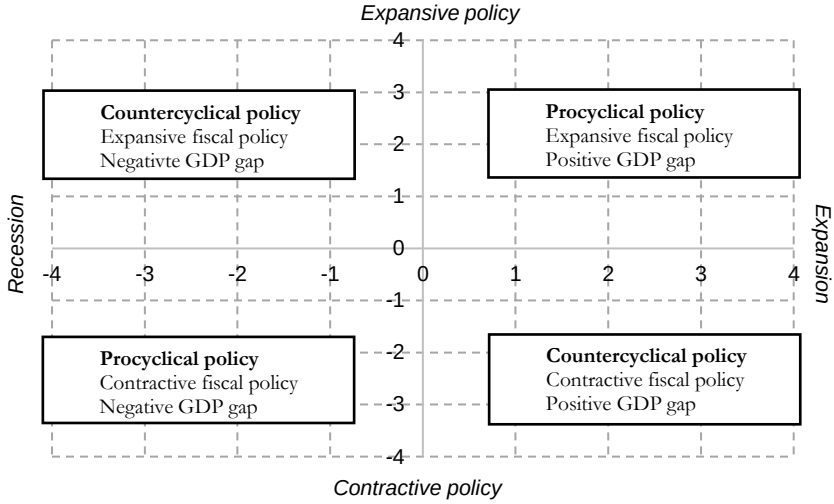
- In a recession, when the structural balance is below the balance target, the observations will be in the *north-western* quadrant.
- In a boom, when the structural balance is above the balance target, the observations will be in the *south-eastern* quadrant.

In the two other quadrants, the fiscal stance is procyclical; in the *north-eastern quadrant*, the structural balance is lower than the target level despite the GDP gap being positive and in the *south-western quadrant*, the structural balance is higher than the target level despite the GDP gap being negative.

In theory, figure 5.3a provides a clear picture of an appropriate fiscal policy over the business cycle. As shown in chapters 2 and 3, the analysis is more complicated in practice. In particular years, there may

be special factors to take into consideration, which entail that fiscal policy should not comply with the countercyclical pattern provided by the figure. In the 2023 Budget Bill, for example, special consideration needs to be taken to the high rate of inflation and the structural balance for 2023 exceeded the target level slightly despite an expected recession. In the following empirical analysis, we describe conceivable causes for fiscal policy in particular years deviating from the average countercyclical pattern we find.

Figure 5.3a Fiscal policy stance and GDP gap



Note: Y-axis: Balance target (zero) minus structural balance. X-axis: GDP gap excluding effects of the structural balance deviating from the balance target (see footnote 135).
Source: Own illustration.

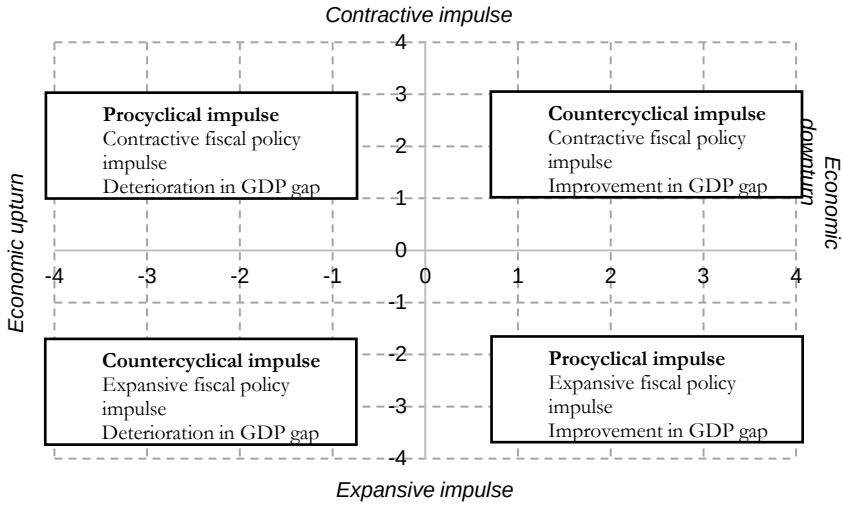
Finally, we use the corresponding figure for the fiscal impulse; see figure 5.3b. On the Y-axis, change in the structural balance is shown, and on the X-axis, change in the GDP gap, excluding effects of change in the structural balance.[142] A countercyclical policy impulse entails that observations are made in the south-western and north-eastern quadrants. In the south-western quadrant, the GDP gap deteriorates, i.e. a downturn in the business cycle, and discretionary measures are

[142] Here, the change in the GDP gap, less effects of changes in the structural balance (Δss), is assumed to follow this correlation: $\Delta y^E = \Delta y^I + \Delta ss$, where the Government's assessment of the change in the GDP gap including fiscal policy, Δy^I, is used in the empirical analysis below.

undertaken that lead to a deterioration in the structural balance. In the north-eastern quadrant, the GDP gap is improved, i.e. a cyclical upturn, and discretionary measures are undertaken that improve the structural balance.

Overall, the fictive example in figure 5.1 shows what the correlation between the structural balance and the GDP gap looks like at a level (figure 5.3a) and when changing respectively (figure 5.3b) in the application of countercyclical fiscal policy. In the remaining part of this chapter, we analyse what the correlation has looked like empirically in recent decades.

Figure 5.3b Fiscal impulse and change in the GDP gap



Note: Y-axis: Change in structural balance. X-axis: Change in GDP gap excluding effects of change in the structural balance (see footnote 142).
Source: Own illustration.

5.2 Fiscal stance

To effectively stabilise the business cycle, assessments of the future economic development are needed. In fiscal policy, decisions on measures for the coming year are mainly taken during the autumn of the previous year. Stabilisation policy is thus based on a forecast, which

means that the fiscal policy intentions at the time of decision may differ from the outcome.[143]

Figure 5.4 shows the four combinations of intentions and outcomes that can arise. From the perspective of stabilisation policy, it is desirable that both the fiscal policy intentions and outcomes are countercyclical (north-western quadrant). Good intentions may, however, retrospectively prove to be "poor cyclical policy", which may depend on misfortune or deficient forecasting ability (north-eastern quadrant). Furthermore, the fiscal policy intentions may be incorrect (procyclical) but the outcomes fortunately are countercyclical (south-western quadrant). Finally, both the fiscal policy intentions and the outcomes can be procyclical (south-eastern quadrant). Overall, only the north-western quadrant is sustainable over time – the fiscal policy intentions and outcomes should both be countercyclical to encourage the aims for stabilisation in fiscal policy.

Figure 5.4 Combinations of fiscal policy intentions and outcomes

		Outcomes	
		Countercyclical	Procyclical
Intentions	Counter-cyclical	Right intentions Right outcomes	Right intentions Bad luck with outcome
	Pro-cyclical	Wrong intetions Luck with outcome	Wrong intentions Wrong outcome (but in line with forecast)

Source: Own illustration.

In this section, we analyse the fiscal stance over the business cycle, both with respect to fiscal policy intentions and fiscal policy outcomes. Parts of our analysis have similarities with the analysis in the ESO report for 2022, referred to initially.[144] The most important differences

[143] For the variables that we focus on here – the structural balance and the GDP gap – there are no true "outcomes", as they are not directly observable. "Outcomes" also refer to how these variables can be estimated in retrospect. This estimate may differ from the estimate made when the decisions were made.
[144] Calmfors et al. (2022).

between our analysis and the analysis in the ESO report are explained in appendix 5B.

We have selected the analysis period 2002–2022 as it was in the budget bill for 2002 (autumn 2001) that the Government for the first time made an assessment of both the structural balance and the GDP gap.[145] The period 2002–2022 is suitable as it is subject to the same stabilisation policy regime. Furthermore, the main structures of the fiscal policy framework from this period are expected to persist in the decade to come as well. This increases the probability of the results having a bearing on what we can expect in the future.

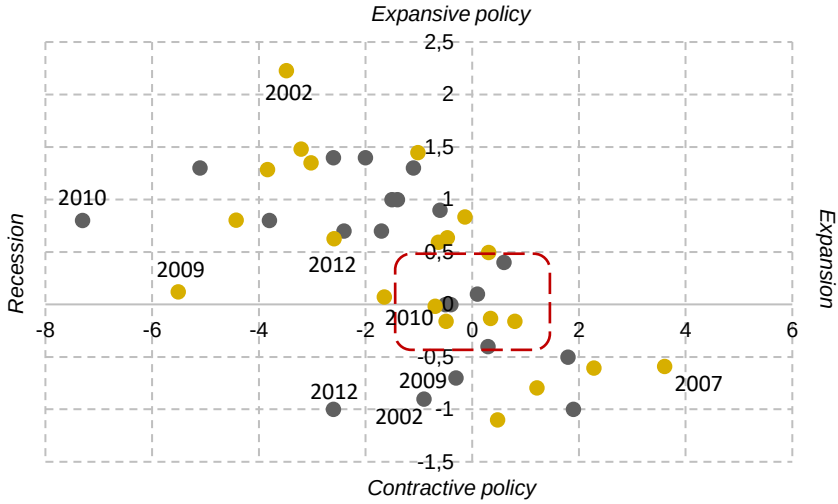
Figure 5.5 shows the correlation between deviation of the structural balance from the surplus target and the GDP gap. We use the same definitions as in figure 5.3a. Grey dots show fiscal policy intentions and yellow dots show outcomes.[146] The dotted rectangle provides a frame for observations where deviations are small from both the surplus target and the cyclical balance.[147]

[145] The 2002 Budget Bill provided an assessment of 2001 as well. As we are going to be analysing changes in the two variables as well, however, 2002 is the first year for which an analysis of level as well as change is possible.

[146] Intentions are analysed as given in each budget bill, and outcomes always refer to the 2023 Budget Bill.

[147] The Council applies the rule of thumb that the balance should deviate by more than 0.5 percentage points from the surplus target to be considered a clear deviation. The fiscal framework uses the term "normal economic situation" whenever the GDP gap is below ± 1.5 percentage points.

Figure 5.5 Fiscal policy stance: correlation between structural balance and the GDP gap



Note: Time period 2002–2022. Grey dots refer to the fiscal policy decided upon in the respective autumn budget (fiscal policy intentions), and yellow dots show the outcome according to the 2023 Budget Bill. Y-axis: Surplus target less structural balance. X-axis: GDP gap excluding effects of structural balance (ss) deviating from the surplus target; $y^E = y^I - (\bar{ss} - ss)$ (see footnote 135).
Sources: Budget bills 2002–2023 and own calculations.

As shown in the figure, fiscal policy has been countercyclical during most years in this time period, and this is true of the fiscal policy intentions (grey) as well as the fiscal policy outcomes (yellow). Most observations are in the north-western quadrant, i.e. that exhibit an economy in recession and an expansionary fiscal policy. Fiscal policy has also been countercyclical when the economy has boomed; that is especially the case ex-post but also ex-ante in the event of large GDP gaps (the south-eastern quadrant).

If we disregard the minor deviations within the dotted rectangle, there are some procyclical elements in the fiscal policy intentions; the structural balance exceeded the surplus target despite there being a recession in 2002, 2009 and 2012 (south-western quadrant, grey). The most striking example is 2012 when the GDP gap was expected to be -2.6 per cent at the same time as the structural balance was expected to exceed the surplus target by 1 percentage point, i.e. a tightening policy despite an expected recession. This was also the only occasion on which the expected fiscal policy was procyclical at the same time as

the GDP gap was outside the "normal economic situation" range, which is defined in the framework as a GDP gap of ±1.5 percentage points. In the event of a larger GDP gap – both more positive and more negative – the fiscal policy intentions and outcomes have always been countercyclical. [148]

Is it possible to find any reasons for the deviations for 2012? In the budget bill for 2012, which was adopted in the autumn of 2011, it was emphasised that the situation of the European economy in particular was very uncertain. The European debt crisis was a fact and a number of southern European countries needed support from other EU Member States and the European Central Bank. The Government anticipated a recession but emphasised the risks of a deeper and more drawn out recession. The contractionary fiscal policy was justified by the need for greater safety margins in public finances if the situation should worsen further. The outcome of the business cycle in 2012 was in line with what was expected while the outcome for fiscal policy was expansionary, contrary to the intentions of the budget for autumn 2011 (the north-western quadrant, yellow).

Furthermore, two observations may be noted where fiscal policy has only been weakly expansionary despite a deep recession (the north-western quadrant); the outcome for 2009 (yellow) and the intentions for 2010 (grey). The Council has previously stated that fiscal policy should have been more expansionary during the financial crisis; the structural balance was only marginally lower than the surplus target for 2009 even though the GDP gap was lower than -5 per cent.[149] Moreover, in the autumn of 2009, the GDP gap was expected to amount to -7.3 per cent in 2010. In spite of this the expected structural balance was less than one percentage point below the surplus target. The outcome of the business cycle in 2010 was much better than feared; in the 2023 Budget Bill, the GDP gap was assessed to have amounted to only -1.6 per cent while fiscal policy was neutral (yellow, within the dotted rectangle).

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[148] This study extends only to 2022, but we can conclude that the fiscal policy for 2023 in the 2023 Budget Bill (i.e., the intentions) would have fallen within the dotted rectangle in the south-western quadrant, as the GDP gap was negative and the structural balance somewhat above target. By this measure, the fiscal policy intentions were thus weakly procyclical. In chapter 3, we assessed that the fiscal policy was reasonable in spite of this considering the high level of inflation, an aspect not taken into account here.

[149] The Swedish Fiscal Policy Council (2010).

Finally, there was one year – 2007 – when fiscal policy ex-post was only weakly countercyclical despite a very strong boom (the south-eastern quadrant, yellow). One cause of this was probably that 2007 would be considerably re-evaluated in cyclical terms; the GDP gap ex-post was considered to be as much as three percentage points higher than when the political decisions were taken. Furthermore, it was the Alliance government's first budget, which contained substantial tax cuts.

Overall, the countercyclical components have dominated fiscal policy, both as regards intentions and outcomes. Outside of what is usually described as a normal economic situation, there is no case of procyclical policy as regards outcomes and only in one case for fiscal policy intentions (2012, grey). In addition, there are cases when the countercyclical policy was noticeably weak despite major deviations from a balanced economic situation; this is the case for intentions in 2010 (grey) and for outcomes in 2007 and 2009 (yellow).

5.3 The fiscal impulse

We will now proceed to analyse the fiscal impulse, i.e. the correlation between the change in the deviation of the structural balance from the surplus target and the change in the GDP gap. As above, the analysis considers both the fiscal policy intentions as expressed in each budget bill in the autumn and the fiscal policy outcome as estimated in the 2023 Budget Bill.

As regards the fiscal policy *intentions*, they are on average countercyclical, i.e. they are in the north-eastern or south-western quadrant (figure 5.6, grey); when an improvement (deterioration) of the GDP gap is forecast, the structural balance increases (decreases), which thereby moves fiscal policy in a contractionary (expansionary) direction.[150] Apart from the observations when the GDP gap is marginal, there is one year when the fiscal policy intentions were procyclical – 2012. As described in the previous section, the Government justified a cautious fiscal policy approach by the great

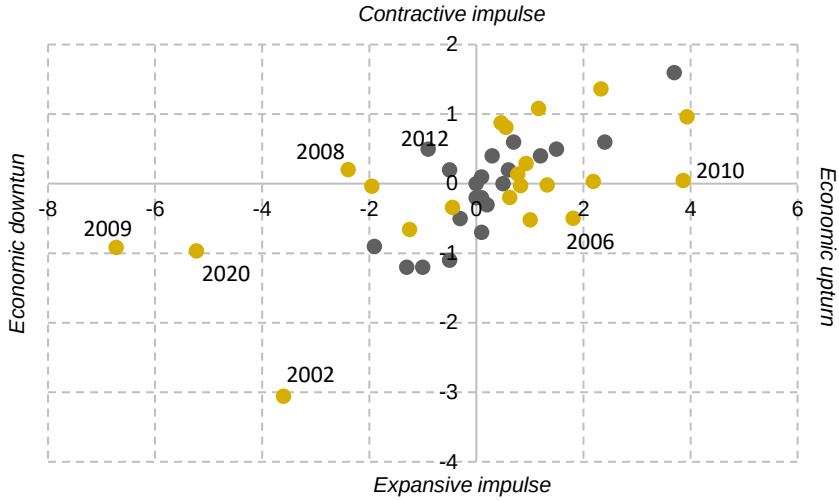
[150] See Footnote: 142.

uncertainty that could entail a need for additional measures in the future.[151]

The fiscal policy *outcomes* vary more widely (figure 5.6, yellow). However, countercyclical policy predominates here as well; fiscal policy moves in an expansionary direction when the GDP gap deteriorates (the south-western quadrant) and the reverse when the GDP gap improves (the north-eastern quadrant). On two occasions, fiscal policy was clearly procyclical, 2006 and 2008. 2008 was special as GDP fell sharply during the autumn when the financial crisis broke out; it is understandable that there was insufficient time to shift fiscal policy in an expansionary direction. Furthermore, it may be noted that the fiscal impulse was only weakly expansionary despite the major weakening of the state of the economy in 2009 and 2020. However, the causes differed; in 2009, with the benefit of hindsight, a cautious fiscal policy was pursued. Fiscal policy in 2020, however, was dramatic; many measures were undertaken during a short period although in relation to the deterioration of the GDP gap, the fiscal policy expansion was not so great.

[151] The fiscal impulse in 2023, from the 2023 Budget Bill, is somewhat contractionary, while the GDP gap was worsened (chapter 2). This observation would thus fall within the north-eastern quadrant, and thereby exemplify weakly procyclical policy. This policy may, however, be justified given the high level of inflation, which underlines the need to analyse individual years, especially those that break the pattern (chapter 3).

Figure 5.6 Fiscal impulse: the correlation between the change in the structural balance and the change in the GDP gap



Note: Time period 2002–2022. Grey dots refer to the fiscal policy decided upon in the respective autumn budget (fiscal policy intentions) and yellow dots show the outcome according to the 2023 Budget Bill. Y-axis: annual change in structural balance.

X-axis: annual change in GDP gap, excluding effects of change in structural balance; $\Delta y^E = \Delta y^I + \Delta ss$ (see footnote 142).
Sources: Budget bills 2002–2023 and own calculations.

5.4 Conclusions

The failures of stabilisation policy in the 1970s and 1980s are important experiences and many of the problems revealed then still need to be included in the discussion. At the same time, the present institutional framework has been created with these problems in mind; it stipulates not only *that* fiscal policy shall be conducted in a countercyclical way but also that the *magnitude* of the measures should be adapted to the cyclical fluctuations. Moreover, the conditions of fiscal policy are affected by an independent central bank with an inflation target. It is therefore important to analyse how fiscal policy has been conducted in the past decades, in particular as there is reason to believe that fiscal policy may have to assume a stabilisation policy role in the future.

In this chapter, we have used a simple analysis to shed light on how fiscal policy has related to the business cycle after the existing framework was established. The analysis indicates that fiscal policy on

average has been countercyclical during the period 2002–2022; this applies both to the fiscal policy intentions, as expressed in the budget bills, and the fiscal policy outcomes as measured in the 2023 Budget Bill. Furthermore, the number of policy mistakes – occasions when fiscal policy has been clearly procyclical – was low according to our analysis both as regards intentions and outcomes.

The current fiscal policy framework both protects against a return to an irresponsible fiscal policy with rising debt and ensures the ability to act to stabilise the economy when necessary. The Council's analysis indicates that fiscal policy has been relatively well timed in relation to the business cycle in recent decades. This experience together with experiences from the pandemic show that fiscal policy's stabilising properties are probably better than reputed. Whether this continues to be the case ultimately depends on political decisions, but if the main components of the fiscal policy framework are maintained and respected, there are grounds for cautious optimism.

Appendix 5A: Net lending over the business cycle

The main text includes an analysis of how the discretionary fiscal policy, measured as the deviation of the structural balance from the surplus target, has been conducted over the business cycle. This appendix presents the corresponding analysis for the net lending which, in addition to the structural balance, also includes automatic stabilisers. The latter vary with the business cycle and it is therefore not surprising that the countercyclical patterns are more pronounced than in the main text.[152] We use the same terminology in this appendix as in section 5.1.

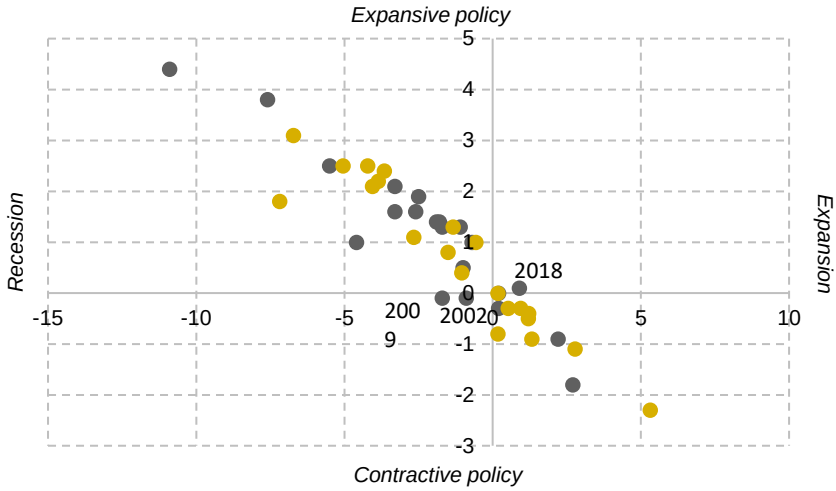
Fiscal stance

The correlation between the net lending and the GDP gap in figure 5A1 is as expected considerably stronger than the correlation between structural balance and GDP in the main text (figure 5.3).

With the exception of three observations when the fiscal policy intentions were procyclical (grey; 2002, 2009 and 2018), the correlation is countercyclical; expansionary fiscal policy when the GDP gap is negative (the north-western quadrant) and contractionary fiscal policy when the GDP gap is positive (south-eastern quadrant).

[152] See Almenberg and Sigonius (2021) for a description of automatic stabilisers in Sweden.

Figure 5A1 Fiscal stance: the correlation between net lending and the GDP gap

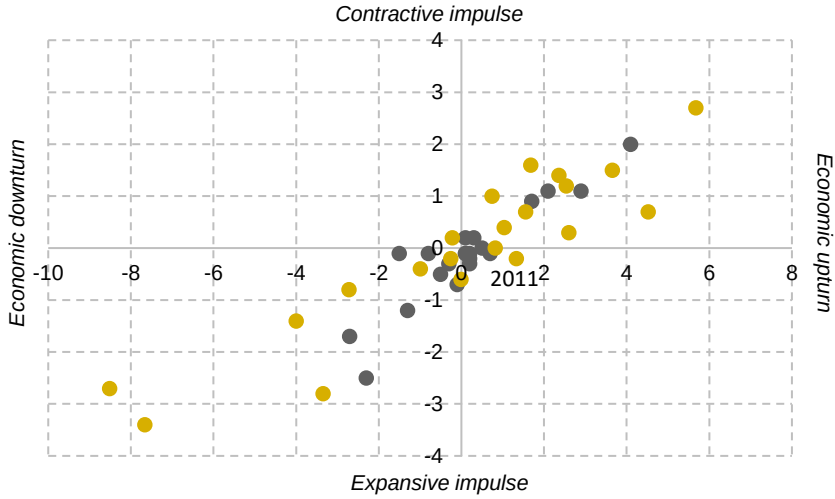


Note: Time period 2002–2022. Grey dots refer to the fiscal policy decided upon in the respective autumn budget (intentions), and yellow dots refer to outcomes from the 2023 Budget Bill. Y-axis: Surplus target minus net lending (fs). X-axis: GDP gap excluding effects of the net lending deviating from the surplus target; $y^E = y^I - (\overline{fs} - fs)$ (see footnote 135). Sources: Budget bills 2002–2023 and own calculations.

Fiscal impulse

As shown in figure 5A2, there is a clear correlation between the change in the deviation of the net lending from the surplus target and the change in the GDP gap and, as above, it is stronger than for the structural balance (figure 5.4). The net lending is generally improved when the GDP gap is strengthened (the north-western quadrant); outcomes for 2011 (yellow) deviate from the pattern slightly as the GDP gap improved by just over a percentage point while the change in the net lending is weakly negative. Furthermore, the net lending is weakened when the GDP gap deteriorates (the south-western quadrant).

Figure 5A2 Correlation between change in net lending and change in the GDP gap



Note: Time period 2002–2022. Grey dots refer to the fiscal policy decided upon in the respective autumn budget (intentions), and yellow dots refer to outcomes according to the 2023 Budget Bill. Y-axis: annual change in net lending (fs). X-axis: annual change in GDP gap, excluding effects of change in the net lending; $\Delta y^E = \Delta y^I + \Delta fs$ (see footnote 142).
Sources: Budget bills 2002–2023 and own calculations.

Appendix 5B: Comparison with the ESO study

An ESO study on the relationship between fiscal and monetary policy was published in September 2022.[153] The fourth chapter of the study includes an analysis of how fiscal policy has been conducted over the business cycle. As described in this appendix, the analysis in our report differs from that in the ESO study as regards data, time period and to a certain extent method, which explains why the results do not always coincide.

In both studies, the deviation of general government net lending from the surplus target is compared to the GDP gap.[154] In the ESO study, this is done in figures that resemble 5.2a in the main text, for both net lending and the structural balance. In this appendix, we focus on analyses of the structural balance, i.e. our measure of discretionary fiscal policy. Another similarity between the studies is that both include a so-called ex-post analysis, i.e. the data used is based on how the structural balance and the GDP gap are estimated presently, instead of how they were estimated in real time (ex-ante). The ESO study also includes, as we do, an ex-ante analysis, but as shown below, this differs from our analysis, which is why the results are not comparable.[155]

Differences in result

Our analysis includes fiscal policy both from the perspective of level and change. The ESO report only analyses the level perspective and we are therefore focusing on differences in this part. The comparison which is thus possible is the ex-post analysis of *how the structural balance's deviation from the surplus target relates to the GDP gap*. We find a certain countercyclical association in our analysis: the structural balance is approximately 0.25 percentage points stronger if the GDP gap is 1 percentage point higher (figure 5.3, yellow). The ESO study does not find any correlation at all, i.e. that the discretionary fiscal policy has been acyclical (figure 4.7 and figure A.2 in Calmfors et al, 2022). There

[153] Calmfors et al. (2022).
[154] A terminological difference is that the ESO study uses the term fiscal *impulse* to describe this, while we use the term fiscal *stance* (section 5.1).
[155] The ex-ante analysis in the ESO report mixes ex-ante and ex-post data. Forecasts for the GDP gap are taken from the budget bills at the time, while data for the structural balance are taken from the NIERs December forecast in 2021 (i.e., ex-post).

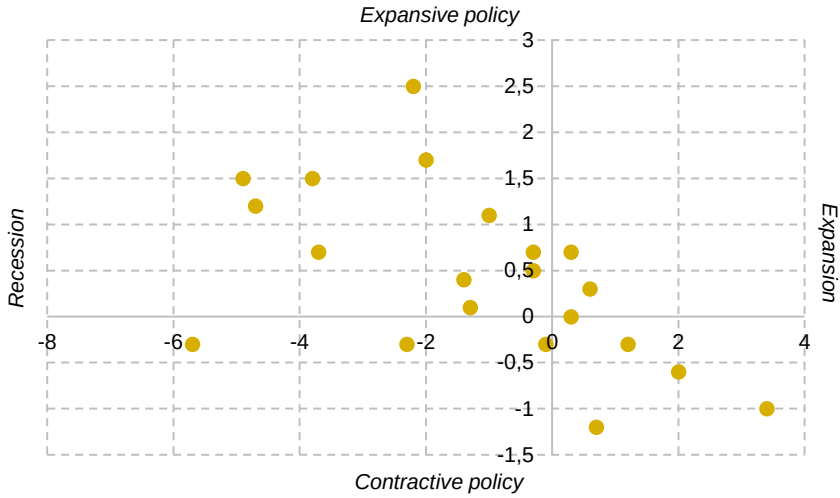
are three possible explanations for the differences in result: choice of *data*, *time period* and *method*. We analyse below which of these choices are important for the difference.

Data

When we investigate the fiscal policy *intentions* (ex-ante) and *outcomes* (ex-post), we use the GDP gap, net lending and structural balance *from the budget bills* over the years; the intentions can be captured by analysing the balances struck by politicians in real time given *their* assessment of how the balance and the GDP gap was developing. When we investigate *outcomes* (ex-post), we use the structural balance and the GDP gap from the 2023 Budget Bill. The ESO study's ex-post-analysis draws data on the structural balance from the National Institute of Economic Research (NIER) and on the GDP gap from Armelius et al. (2018). In one of the study's appendices, NIER'S GDP gap is used instead, although the results do not materially differ.

To investigate what significance the data source for the structural balance and the GDP gap might have, we can replace the assessments from the 2023 Budget Bill in our analysis by NIER's assessments from December 2021, which the ESO report uses in appendix A3 (figure A.2). The result of this substitution is shown in figure 5B1 below and should be compared with figure 5.3 in the main text (yellow). The correlation is similar; the correlation with NIER's measure is -0.22, while the correlation when we used the estimate in the budget bill was -0.25. As regards the ex-post analysis, the choice of data – NIER's or the Budget Bill's – thus does not make any significant difference for the correlation.

Figure 5B1 The correlation between structural balance and the GDP gap when NIER assessments are used



Note: Time period 2002–2022. Y-axis: Surplus target less structural balance. X-axis: GDP gap excluding effects of structural balance (SS) deviating from the surplus target; $y^E = y^I - (\bar{ss} - ss)$ (see footnote 135).
Sources: NIER (2021) and own calculations.

Time period

In our analysis of level, we study the period 2002–2022 while the ESO report starts in 1996. There are several factors to our choice of starting the analysis in 2002. 2001 was the first year in which the structural balance was reported in the budget bill, and also the first year that the surplus target (then 2 per cent) was applied.[156] The measure that we use (and that the ESO study uses) of expansionary/contractionary fiscal policy in the analysis of level is based on the assumption that the economic operators are aware of the surplus target and regard it as credible (in-depth box 5.1). It can be argued that this was not a reasonable assumption until the beginning of the 21st century.

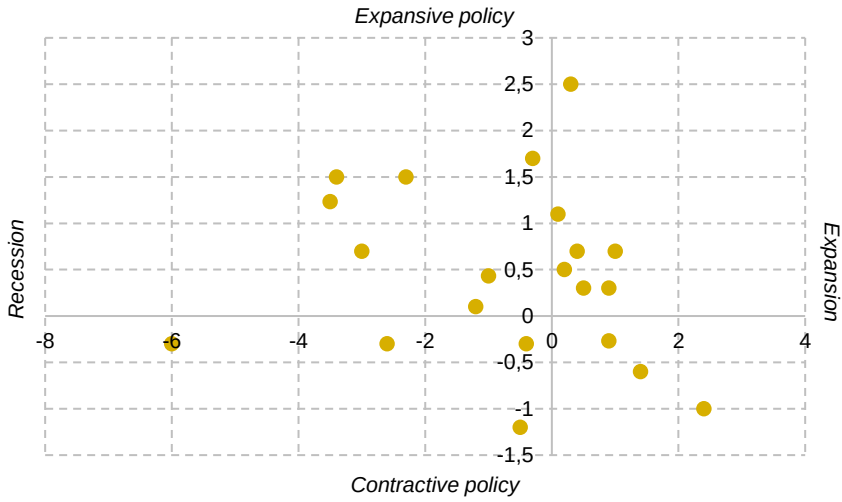
We are unable to investigate the significance of beginning the analysis in 1996 with the aid of our data, since the structural balance was not included in the budget bills prior to 2001. However, we may

[156] Swedish Fiscal Policy (2008). The Government had a varying balance target during the second half of the 1990s. In 1996, the target was a deficit of 3 per cent, and in 1997, there was a balance target. In the 1997 Spring Fiscal Policy Bill, the introduction of a surplus target of 2 per cent above the business cycle was announced; this would later be gradually phased in and applied as of 2001.

illustrate the importance of the choice of time period by using the ESO study's data from NIER, but using the series that starts in 2002 instead of 1996.

The result is shown in figure 5B2 and should be compared with figure A.2 in the ESO report. It should be noted that the ESO study's method is used in both cases; we analyse effects of the methodological difference below. The deficiency in the correlation is similar; in the sample that begins in 2001, the correlation is -0.08 which should be compared with the zero correlation obtained when the ESO study starts in 1996. Beginning the analysis in 2002 thus means that the correlation becomes weakly countercyclical, instead of acyclical as it is when the analysis starts in 1996. The choice of time period thus seems to have some effect.

Figure 5B2 Correlation between structural balance and the GDP gap when the ESO method and data are used in the time period 2002–2021



Note: Time period 2002–2021. Y-axis: Surplus target less structural balance. X-axis: GDP gap. Sources: NIER (2021) and own calculations.

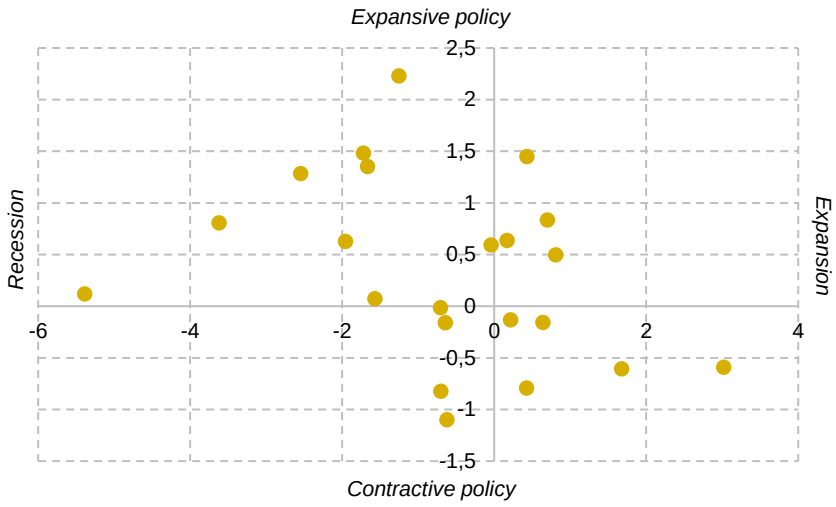
Method

Finally, there is a difference between our method and that of the ESO study. Both studies analyse whether there is any correlation between structural balance and the GDP gap, i.e. how fiscal policy has been conducted over the business cycle. If, for example, the structural

balance and the GDP gap are related to one another and the effect on GDP of the structural balance *in itself* is disregarded, any countercyclical association will by definition decrease when we attempt to measure it. A ”perfect” fiscal policy which evens out all cyclical fluctuations will be interpreted as acyclical as the GDP gap, in that case, is zero over time while the structural balance varies. In the ESO study, this problem is pointed out although no adjustment is made of the GDP gap for the effects of the policy pursued. As show in section 5.1 (footnote 135), we adjust for this in our study.

To investigate the significance of this methodological difference, we redo the analysis with the ESO study's assumption, that the level of the structural balance does not affect the GDP gap. The result is shown in figure 5B3 below, which should be compared with figure 5.3 (yellow) in the main text. Applying the ESO method, as expected, the countercyclical correlations is somewhat weaker, with a correlation of -0.16 compared to -0.25. Removing the effects of the fiscal policy conducted is accordingly, as expected, of material importance.

Figure 5B3 The correlation between structural balance and the GDP gap when the ESO method is used on our data



Note: Time period 2002–2022. Y-axis: Surplus target less structural balance. X-axis: GDP gap.
Sources: The 2023 Budget Bill.

Conclusions

The ESO study's analysis of how the deviation of the structural balance from the surplus target co-varies with the GDP gap shows an acyclical correlation. Our analysis indicates a countercyclical correlation; the structural balance is approximately 0.25 per cent higher when the GDP gap is 1 percentage point higher. There are three main differences between our study and the ESO study: data sources, time period and method. As shown in this appendix, the data source is of marginal importance. The difference is instead due to the choice of time period and method. As we argued above, there are reasons for starting the analysis in 2002 and adjusting the GDP gap in order to take into consideration the effects of the fiscal policy conducted.

6 The frames for fiscal policy

Fiscal policy is of great importance to people's livelihoods and plays a key role in political discussions. Since the beginning of the 21st century, fiscal policy has been conducted in accordance with the fiscal policy framework. In the most recent revision in 2019, it was decided that the framework would be reviewed every eighth year. The next review will therefore take place in 2027. In last year's report, we discussed a number of areas that may be important for the future levels of the target balance and the debt anchor. This chapter is intended to deepen this discussion.

The issue of the appropriate target balance and debt anchor is multi-faceted and there is no simple answer.[157] We know from experience that countries can function well despite a very high level of public debt. At the same time, deep crises caused by problems with government finances have been a common occurrence. These crises have often arisen rapidly when conditions in particular countries or in the world economy have changed. The level of public debt has therefore attracted great attention when international organisations assess a country's economic policy or when financial markets make decisions on lending. Public debt is also a central component of the EU fiscal policy framework.

The previous fiscal policy review was done by a parliamentary committee, the Surplus Target Committee.[158] It presented its report in September 2016 and proposed that the surplus target be reduced from 1 to 1/3 per cent of GDP and that a debt anchor of 35 per cent should be introduced in 2019. Since then, for natural reasons, circumstances have changed and new knowledge has been obtained.

In the following, we point to some areas which were not taken into account in the previous review, and which have come to the fore since then. In section 6.1, we assume that the coming framework period 2027–2034 will be characterised by what we refer to as "normal circumstances". This means that monetary policy can achieve the targeted inflation rate and full resource utilisation without having to resort to unconventional measures. We discuss various arguments for and against increased public debt under these circumstances and apply

[157] Balance targets specify what the net lending of the public sector should amount to over a business cycle. At present, Sweden has a positive balance target, which is called a surplus target.
[158] SOU 2016:67.

them to Sweden. In section 6.2, we describe how the analysis changes if the coming period is affected by so-called secular stagnation: a state of the economy with persistently weak private demand and a monetary policy struggling to achieve its aims. We discuss the policy options available in such a situation and the advantages and disadvantages of each measure. As far as we know, no attempts have been made to analyse the applicability of this perspective to Sweden. We therefore give it particularly great attention. The final section gives a summary of the Council's conclusions.

6.1 Fiscal policy under normal circumstances

The Surplus Target Committee analysed different levels of the balance target and their effects on public debt on the basis of three aspects: *long-term sustainability*, *inter-generational fairness* and *socio-economic efficiency*. By long-term sustainability, the Committee meant that a particular target balance should entail that public debt as a proportion of GDP stabilises in the long term. By inter-generational fairness, the Committee meant that the individuals' 'net benefit' from the public sector – the welfare received in return for a particular level of tax – should be unchanged over time. Among other things, this means that temporary demographic 'bulges' justify variations in the target balance and thus also in debt. Under the heading socio-economic efficiency, the Committee emphasised that there is a value in tax smoothing.[159] This means that major crises such as war, financial crises or pandemics should be financed via higher public debt.[160] Socio-economic efficiency is a large area that includes everything from the design of the tax system to how public services are produced. As regards inter-generational fairness, the focus is, however, on avoiding large fluctuations in rules from year to year. Socio-economic efficiency

[159] Just as there is a value in tax smoothing, there is also value in expenditure smoothing, as it contributes e.g. to households receiving a stable consumption of public services and, via stable levels of transfers, maintaining a stable consumption of private goods and services.

[160] It should be noted that tax and expenditure smoothing are not the primary motivation for varying public debt over the business cycle. That increased deficits in recessions are not counteracted by higher taxes or lower expenditure is primarily because it would risk further worsening the economic situation (i.e. procyclical fiscal policy).

should also include there being sufficient safety margins in public finances to be able to deal with deep recessions and crises.[161]

In order to take long-term sustainability and inter-generational fairness into account, an analysis of suitable target balances and debt anchors during the next framework period also needs to include the decades following this period. It is only then that we can see whether present and future generations can be offered the same welfare for a similar tax burden without a tendency for the debt burden to increase or decrease. An analysis of this kind can be made with the aid of public finance projections. Projections can either assume that the current tax rules and welfare commitments are maintained or that a particular balance will be achieved.

The projections show the development of the general government net lending and debt, assuming that current tax rules and welfare commitments are maintained (i.e. that the net benefit from the public sector is constant). The projections may, for instance, indicate a dynamic where demographic changes and other structural trends lead to a decade with low net lending followed by a decade with high net lending. Correspondingly, temporarily high investments during a framework period can entail a debt level which increases and subsequently decreases. Figure 6.1 (grey line) shows NIER's most recent projection where the debt decreases in future decades, stabilising at approximately 15 per cent of GDP.[162] In this scenario, general government net lending will be just over 1.3 per cent of GDP on average in 2023–2050, i.e. 1 percentage point above the current balance target.

It is also important to study how the debt level will evolve if an assumed target balance is met. It is then possible to adapt the target to achieve a desired development of debt. If this net lending deviates from the net lending with current tax rules and welfare commitment, changes in fiscal policy will be required. If the target balance which produces the desired debt exceeds the net lending stated in the projections with the maintenance of current tax rules and welfare commitments, then priorities will be required in the form of higher taxes or lower expenditure; in the converse case, there is scope for

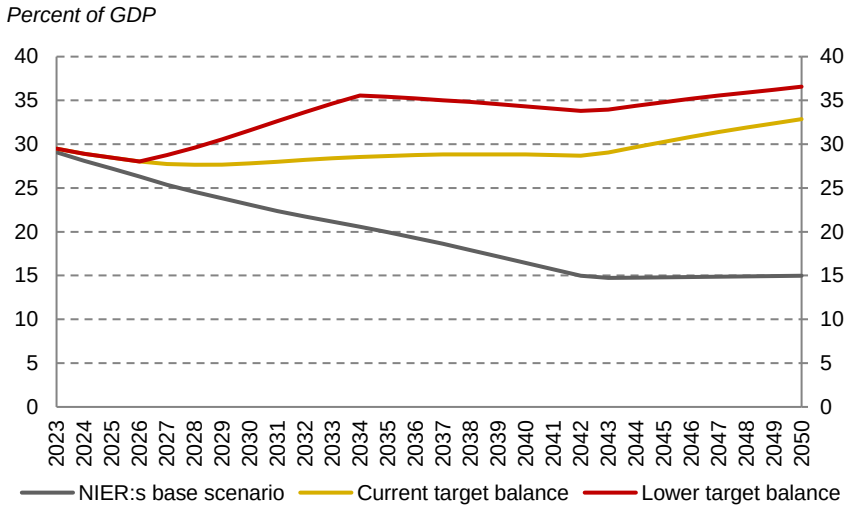
[161] At the same time, it may be noted that the level of the balance target cannot be evaluated from an efficiency perspective, as a certain balance target can be financed with both variation in expenditure and in taxation.

[162] NIER (2022). The calculations apply the assumption that current tax rules and welfare commitments will remain in the future.

reduced taxes or increased expenditure. In a scenario where fiscal policy is adapted to achieve the current target balance, primary net lending as a proportion of GDP may on average be around 0.4 percentage points lower per year up to 2050 compared with NIER's base scenario, which corresponds to permanent measures of around SEK 28bn in current monetary value, and the Maastricht debt will be just under 33 per cent of GDP in 2050 (figure 6.1, yellow line).[163]

If the balance target during the next framework period was instead one percentage point lower than during the current period, i.e. -2/3 per cent of GDP, to then return to the current level, this would lead to an increase in debt during the period 2027–2034 (figure 6.1, red line). The debt would then be around 37 per cent of GDP in 2050.

Figure 6.1 The development of Maastricht debt in three scenarios



Note: In NIER's base scenario, general government net lending is endogenously determined, amounting on average to around 1.3 per cent of GDP 2023–2050. The yellow line shows the development if the current balance target of 1/3 per cent of GDP is retained. The red line shows development if the balance target is temporarily reduced to -2/3 per cent of GDP during the framework period 2027–2034 to subsequently return to the current target of 1/3 per cent of GDP.
Sources: National Institute of Economic Research and own calculations.

[163] Appendix 6B describes how these are calculated.

6.1.1 Public investments

One reason for a lower balance target in the next framework period would be if public investments are expected to be temporarily high.[164] On the basis of a welfare perspective, public investments should, regardless of the form of financing, take place provided that the socio-economic revenue exceeds the socio-economic cost. Socio-economic revenue and expenses can be of a non-monetary kind. The monetary costs of public investments in principle exceed the monetary revenue in the short-term without exception so that investments need to be financed by higher taxes or lower expenses if net lending is to be unchanged.

In the event of an even development of public investments, the annual costs are not affected by whether public sector investments are financed by debt or not; either the investments are paid up front or else annual interest and amortisation is paid on historic investments. In periods when investments are temporarily high, debt finance may be justified. An investment bulge of this kind may result from demographic developments requiring additional public buildings such as schools, from a new defence policy requiring investments in weapon systems or from a new direction in climate policy which necessitates investments in infrastructure. An investment bulge may also result from historic public sector underinvestment in one or more areas, i.e. that there is a so-called investment debt.

The Council has previously emphasised the importance of investigating the extent to which public funds are needed in the climate transition.[165] Since the work of the Surplus Target Committee, the climate issue has become increasingly important, as knowledge about human impact on the climate has accumulated. The year after the Committee's report, in 2017, a climate policy framework was adopted by the Riksdag which, among other things, included new climate goals, a climate law and the establishment of the Climate Policy Council. The Committee's report does not deal with the extent to which strains on general government finances arising from the climate transition can have implications for the design of the framework. The Climate Policy Council has drawn attention to the need for a lower target balance to

[164] Fatás et al. (2019).
[165] The Swedish Fiscal Policy Council (2022).

finance climate policy measures with public funds.[166] We noted in last year's report that there is no summary available of the public commitments that will be necessary, both to combat global warming and adapt society to the changes that have already taken place and will continue even if the warming is slowed down. Based on existing assessments, the need for publicly financed climate-related investments appears smaller than at least we had anticipated. At the same time, we pointed out that there are several areas where more knowledge is needed. The main issue is whether the climate transition will require a public investment bulge during the next framework period. It should be self-evident that a good basis for decision needs to be produced in this area, which is of key importance for the development of both economy and welfare in the coming decades.

Furthermore, Russia's war of aggression against Ukraine has led to an increased focus on Sweden's defence capacity and the munitions that the Armed Forces require. We cannot assess the extent of the investments the Armed Forces will need due to the new security policy situation, but possible investment bulges in this area need to be considered in the next review of the surplus target.

There are also other types of investments that need to be analysed. The Surplus Target Committee took into consideration the increased investment requirements of municipalities due to, among other things, the rapid population increases among younger people and the elderly. The municipalities' main steering oar is their net income. Higher investments lead to higher depreciation for a number of years, and thus reduced net income during this period. Their net lending deteriorates, however, by the whole sum immediately when the investment is made. If the municipal budget balance requirement remains unchanged, increased investments therefore lead to a deterioration in net lending. The Surplus Target Committee used this as a reason why the surplus target for the public sector – which includes municipalities – should be reduced. If the increased investment requirement for the municipalities was temporary, it was reasonable to reduce the surplus target from a tax and expenditure smoothing perspective.

However, the Committee's report lacks an analysis of the future investment requirement in the central government sector. Central

[166] The Swedish Climate Policy Council (2021).

government investments have amounted to around 2.5 per cent of GDP per year in the past two decades, which is around 0.5 percentage points higher than municipal investments. The next review should also analyse the state investment requirement for the period 2027–2034 to assess whether it is expected to be higher or lower than normal. In connection with the review, there will be a new infrastructure plan for the period 2026–2037 to consider. As the Council emphasised in last year's report (in-depth box 4.1), the current infrastructure plan for the period 2022–2033 entails an increase of around SEK 10 billion per year (fixed prices) compared with the previous plan. It remains to be seen when the next plan is published whether this increase is temporary. The choice of target balance and debt anchor need not, of course, be affected by minor deviations from historic investment patterns, but there are areas where there may potentially be larger deviations.

6.1.2 Risks of excessively high government debt

As described initially, from an intergenerational perspective, there is an argument for varying the debt over time to obtain unchanged net benefit from the public sector. Another issue is the level around which the debt should be permitted to vary; what risks are there with a debt level that is either too high or too low?

A common objection against increased public debt is that it leaves future generations with the bill. However, this is not the case if the interest rate on public debt is persistently lower than the nominal growth of GDP. When the so-called interest rate-growth differential is negative, taxes need not be increased in the future despite increased debt. On the contrary, the higher the debt ratio is, the lower the so-called primary net lending needs to be to maintain the debt as a constant share of GDP in the long term.[167] The interest rate-growth differential has been negative on average since the early 2010s and if this development were to continue for ever, increased debt does not mean that taxes have to be raised or expenses reduced in future. There are, however, considerable risks associated with a strategy of this kind,

[167] In the long term, the following relationship applies between the primary net lending, *ps*, and interest rate growth differential $(r-g)$: $ps=(s-a)(r-g)$ where *s* is public debt and *a* public assets, all as a proportion of GDP. If $r-g<0$, primary net lending must decrease if the debt ratio is higher in equilibrium: $\frac{\partial ps}{\partial s}=(r-g)<0$.

in part because the general level of interest rates in other countries and in Sweden may be higher in future and lead interest on public debt to exceed the growth rate, in part because the level of the debt *per se* can affect the government bond rate. The developments of the past year, which have led the policy rate to increased from 0 to 3.5 per cent, shows that interest rates can change rapidly.

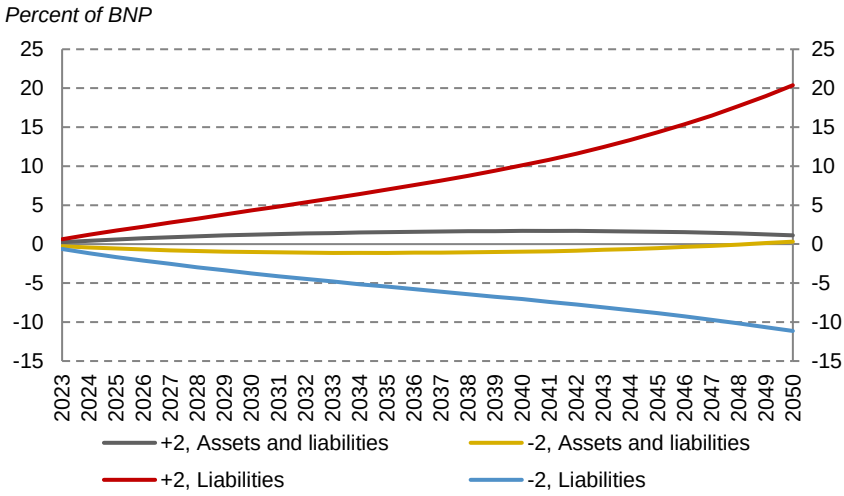
Interest rate changes affect public finance projections by impacting the interest rate on the debt and the yield of financial assets. Figure 6.2 shows the effect that higher or lower interest rates may have on the development of debt. The starting point is the base scenario in NIER's most recent sustainability calculations, although we are assuming that the interest rate on the Maastricht debt is 2 percentage points higher (lower) from 2023.[168] If we start by assuming that interest rates on the financial assets will not be affected, higher (lower) interest rates on debt will lead the debt to increase (decrease), see the red (blue) line in figure 6.2.

However, a more reasonable assumption is that higher interest rates affect both the interest rates on the Maastricht debt and on the public sector's interest-bearing assets, which amount to around 20 per cent of GDP.[169] According to these calculations, the development of the Maastricht debt is relatively neutral in relation to the interest rate level (grey and yellow lines). As the interest-bearing assets are of roughly the same size as the public debt, the impact of the interest rate changes in the Maastricht debt will be neutralised by income from the asset-side. It should also be pointed out that the central government has non-interest-bearing assets amounting to around 30 per cent of GDP. How the yield from these assets is affected by changes in the interest rate level is a complex issue which needs to be carefully analysed in the next review.

[168] The calculations are described in appendix 6B.

[169] The old-age pension system's assets are also affected by changes in the interest rate, but that effect is visible only in the public sector's net wealth, and not in the Maastricht debt (see appendix 5 in the Swedish Fiscal Policy Council, 2021). A durably higher interest rate will also have effects on tax receipts and the valuation of the public sector's financial assets. Such effects are not included in the calculation, but are important to consider in the next review.

Figure 6.2 The significance of the interest rate for the Maastricht debt



Note: The interest rate is changed by 2 percentage points in each scenario.
Source: Own calculations.

For natural reasons, there is considerable uncertainty about which structural trends will dominate in the decades to come. As described in the next section, there are economic analysts who anticipate that interest rates will fall again and produce a clearly negative interest rate-growth differential after the current inflationary impulse has ebbed out. At the same time, others point to the great need for investment globally to meet the climate challenges which, together with lower net lending driven by an increase in the proportion of elderly people, might lead to a trend of growing interest rates.

Finally, there are a number of risks with public debt that are often emphasised. The most serious risk is if the debt level is at a level which makes it difficult in public finances – or extremely expensive – to support the economy in a crisis. Crises of confidence of this kind occurred during the euro crisis of 2012 when interest rates on central government debt of the countries in crisis rose rapidly. Sweden is a small economy and thus sensitive to speculation and changed investment strategies from global investors. The trend towards a weaker krona and a further depreciation since the outbreak of the war in February 2022 is a manifestation of this. We have both a comparatively large banking sector and high private indebtedness. In

an international or domestic crisis, the central government may need to borrow substantial amounts to avoid very negative outcomes. Furthermore, the corona pandemic and the war in our vicinity have shown that there is considerable uncertainty in surrounding countries. It is important to have fiscal space to meet these risks.

At the same time, a coming review needs to consider the international context in which this is taking place. One aspect of this is the partly revised view of public debt expressed by the European Commission's proposal for a new framework for economic governance. As described in in-depth box 6.1, the European Commission has proposed that adjustment to (the unchanged) debt limit of 60 per cent may proceed more slowly than in the previous regulatory framework. Furthermore, adjustment may be postponed if countries undertake to make investments, preferably in the areas of climate and digitalisation.

To sum up, as the Surplus Target Committee notes, it is difficult to know at what debt levels problems may arise; this depends, besides the debt level, on context, where favourable debt history, political support for strong frameworks and flexible exchange rates are factors which reduce the risk.

6.1.3 Risks of low central government debt

The Surplus Target Committee also briefly considered the risk of *too low* central government debt. They referred to the report *Policy review of central government debt* (SOU 2014:8), which made the assessment that a central government debt of at least 10–15 per cent of GDP was needed to ensure the retention of established markets and borrowing channels. This is particularly important if a situation arises when central government rapidly needs to borrow large amounts. Since the Surplus Target Committee's work in 2015–2016, the Riksbank's holding of central government bonds has doubled and now amounts to over 40 per cent of the total stock. This means that less than 60 per cent of the central government debt, which in 2022 was 16.5 per cent of GDP, is available for other actors in the market. Accordingly, the value of government bonds traded in the market only amounts to 10 per cent of GDP. It is difficult in the current situation to know what holding of central government bonds the Riksbank intends to retain in normal periods going forward. However, it is probable that purchases of

government bonds will also be used in the future when inflation is too low, particularly if the policy rate is limited by the effective lower bound. The coming review of the framework needs to analyse this issue to assess the minimum level of central government debt.

In-depth box 6.1 The European Commission's proposed EU economic governance framework

The rules of the Stability and Growth Pact, including the amendments[170] introduced after the financial crisis, were paused in 2020 when the pandemic broke out. The pause was intended to apply until the end of 2022 but has been extended until the end of 2023. Even before the pandemic broke out, there was an ongoing process to review the EU fiscal policy framework. This process continued throughout the pandemic and the European Commission submitted its proposal on 9 November 2022. It is intended to be introduced in 2024 although no decision has been made yet. The main features of the Commission's proposal are described below.

The Commission's proposal is broader than the Stability and Growth Pact's rules and is referred to as the EU economic governance framework.[171] The framework has two overall aims: to ensure the sustainability of public finances and to achieve sustainable growth. This should take place through measures in three areas.

The first area is the EU fiscal policy framework. The original limits for deficits (3 per cent of GDP) and Maastricht debt (60 per cent of GDP) are retained but a shift in application is proposed, in particular regarding debt adjustment. Since 2011, the so-called 1/20 rule has been applied which means that countries with a Maastricht debt of over 60 per cent should reduce the excess portion by 1/20 per year. It is proposed that this arrangement be replaced by medium-term structural plans for each country. Furthermore, it is proposed that countries be divided into groups: high, medium and low risk based on a Debt Sustainability Analysis, DSA. For countries with a high (medium) risk, the Council of Ministers shall approve a plan that brings debt as a proportion of GDP downward at the latest after four (seven) years.[172] Regarding the limit for deficits of 3 per cent of GDP,

[170] These are the so-called six-pack and two-pack amendments adopted in 2011 and 2013, respectively (European Commission 2011, 2013).
[171] The European Commission (2022).
[172] The preparation of a four-year plan thus does not apply to Sweden as long as the Maastricht debt is less than 60 per cent of GDP.

an adaptation shall be considered within the framework of the above-mentioned plan if a country has too large a deficit. In relation to the Swedish framework, it may be noted that the Commission's proposal means that a net expenditure ceiling will be used as steering oar in the fiscal policy plans. This consists of general government expenditure, excluding net interest, cyclically related expenditure for unemployment insurance and income ensuing from discretionary tax changes.[173]

The second area in the proposed framework concerns reforms and public investments to promote sustainable growth; specifically, of the emphasis is on measures related to digitalisation and climate change. It is well known that the development of public investments in the EU has been sluggish since the financial crisis. According to the Commission's proposal, countries may be permitted to have a slower reduction of the Maastricht debt if they implement investments within these areas which also contribute to sustainable public finances in due course.

The third and last area is a revision of preventive and corrective measures in the Macroeconomic Imbalance Procedure, MIP. The analysis shall be more forward-looking with a view to identifying early warning signals. For countries where imbalances have been identified and which have a Maastricht debt exceeding 60 per cent, the above-mentioned plans shall include measures to deal with these imbalances.

In summary, the Commission is proposing relatively large changes. This is particularly true of the country-specific plans that the Council of Ministers, in response to proposals from the respective country, shall decide on. In Sweden's case, the Commission's proposal does not entail any significant changes as long as our Maastricht debt does not exceed 60 per cent of GDP. These changes do, however, assign greater flexibility and importance to country-specific conditions if the 60 per cent limit is exceeded. This is worth noting in the discussion on what constitutes a suitable debt anchor in the coming review.

[173] The Commission emphasises that the proposal entails a transition to *one* indicator not dependent on non-observable data such as the GDP gap and the structural balance. However, this is not quite accurate. As pointed out by e.g. Wyplosz (2022), the suggested indicator includes such variables, in part to calculate how discretionary tax changes affect income, and in part to assess cyclical unemployment compensation.

6.2 Fiscal policy under conditions of structurally weak private demand

At the time of the most recent review of the fiscal policy framework, interest rates were very low in the global economy. The central banks' policy rates were around zero in many advanced economies, while growth was relatively weak and inflation was below target. The situation was the result of a trend that had been ongoing for several decades, and leading economists argued that the development had far-reaching consequences for macroeconomic policy. The implications for fiscal policy in Sweden, and thus for the fiscal policy framework, were not, however, analysed in the review.

In the current situation, the issue may seem irrelevant given the past year's rising interest rates, and it is, of course, unclear whether the low interest rate economy will return. However, many analysts argue that the advanced economies will return to the pattern they were in before the pandemic.[174] In light of this, it is important to analyse the implications that the low interest rate economy has for the role of fiscal policy in the next framework period (2027–2034).

A relevant perspective in this context is the hypothesis of secular stagnation. This hypothesis claims to explain the development of advanced economies during the past decades, with relatively low growth and inflation below target despite very expansionary monetary policy.[175] Put simply, the explanation, in this view, is that advanced economies will be characterised by a structural deficit of private demand which has led to a need for lower and lower interest rates to maintain full resource utilisation and the targeted inflation rate.[176] With secular stagnation, the macroeconomy risks functioning worse in at least three ways. It will become more difficult for central banks to conduct an effective monetary policy that stabilises cyclical fluctuations, GDP growth can become persistently weak if the interest rate is not sufficiently low and financial markets can become more volatile, with an increased occurrence of financial crises as a result.

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[174] For example, Blanchard (2023), Buiter (2023), Calmfors et al. (2022), IMF (2023a) and Rajan (2022). Other economists, e.g. Goodhart and Pradhan (2020) and Summers (2023) hold the view that interest rates will not return to zero after the ongoing rise.

[175] Summers (2015).

[176] Secular stagnation is one of several proposed explanations for the low interest rate situation. See appendix 6A for a discussion of other hypotheses.

The discussion on secular stagnation has mainly been conducted by US researchers, usually with the United States as focus. The Council has not seen any attempts to discuss the extent to which the hypothesis is applicable to small open economies such as Sweden, nor the extent to which symptoms of secular stagnation can be affected by changes in the contribution made by fiscal policy to aggregate demand when the economy is in balance. Economists have, however, underlined the desirability of a discussion on this topic.[177] These issues are important for the levels of the framework, as the target balance and debt ratio affect how much the general government sector contributes to demand. It is therefore important that the hypothesis of secular stagnation is considered in the next review. This section is intended to highlight these issues from a Swedish perspective.

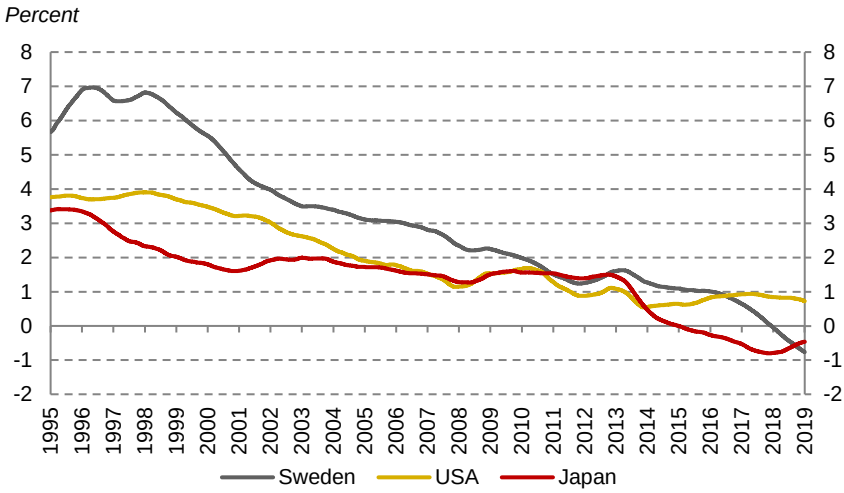
6.2.1 The macroeconomy under secular stagnation

Secular stagnation is characterised by a combination of low growth, low interest rates and low inflation. Structurally weak private demand leads to a low interest rate being required to achieve full resource utilisation and the targeted inflation rate. This description fits relatively well with the development of advanced economies in recent decades. As shown in figure 6.3, real interest rates have fallen sharply since the 1990s. In the absence of structural changes, a lower real interest rate leads to higher growth and higher inflation. As shown in figures 6.4 and 6.5, however, both growth and inflation in advanced economies have decreased or been unchanged as interest rates have fallen. The combination of falling interest rates, low growth and persistently low inflation means that the neutral real interest rate – the interest rate that is compatible with full resource utilisation and inflation on target – has continuously decreased.[178] This is the core of the hypothesis of secular stagnation. Many estimates have been made of the neutral real interest rate in advanced economies.[179] The overall picture is that the decrease

[177] Jansson (2021).
[178] Inflation, the interest rate situation and growth have also been affected by factors that are not tied to secular stagnation, e.g. the increased credibility of inflation targets, China's entry into the WTO, productivity developments etc. See appendix 6A.
[179] The estimates of the neutral real interest rate referred to in this section are made with the Laubach Williams model. The model has become something of a standard; see Laubach and Williams (2003) and Holston et al. (2016) for a technical description.

since the 1970s amounts to between 3 and 5 percentage points and that the level before the pandemic was about zero or lower, both in Sweden and in the industrialised world as a whole (figure 6.6).

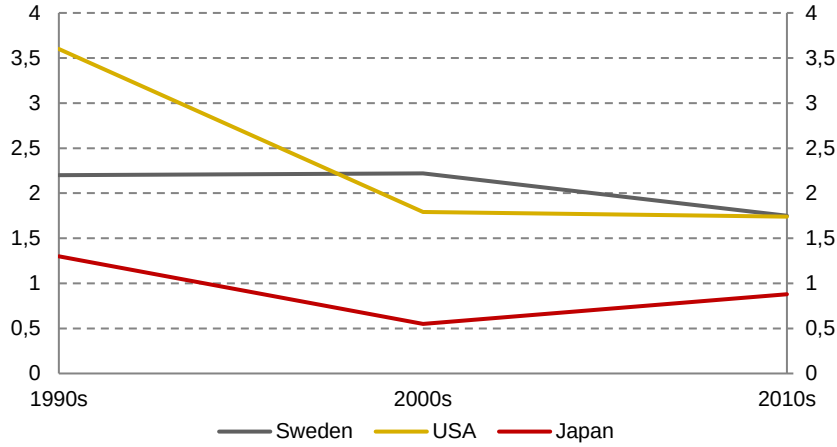
Figure 6.3 Real interest rates



Note: Ten-year government bond yield less the inflation rate, 1995–2019; five-year moving average. The euro area is not included as many euro countries have government bond rates that have periodically included large risk premiums.
Sources: National statistical authorities and central banks via Macrobond and own calculations.

Figure 6.4 Global GDP growth

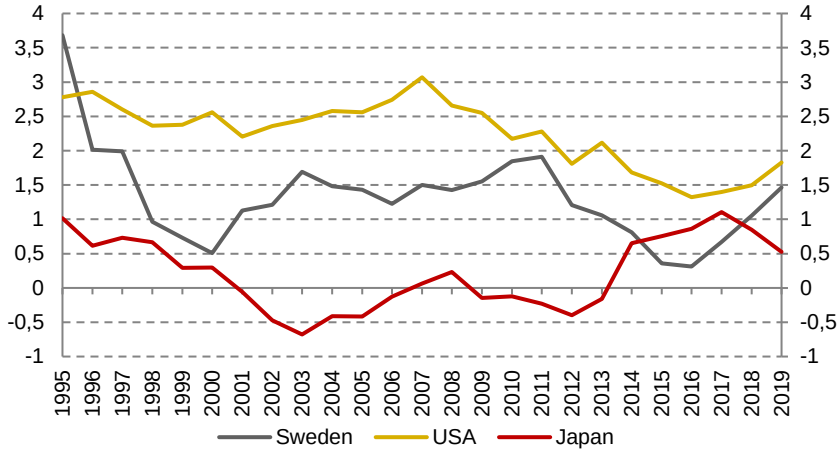
Annual percentual change



Note: Constant prices, ten-year average.
Sources: National statistical authorities via Macrobond.

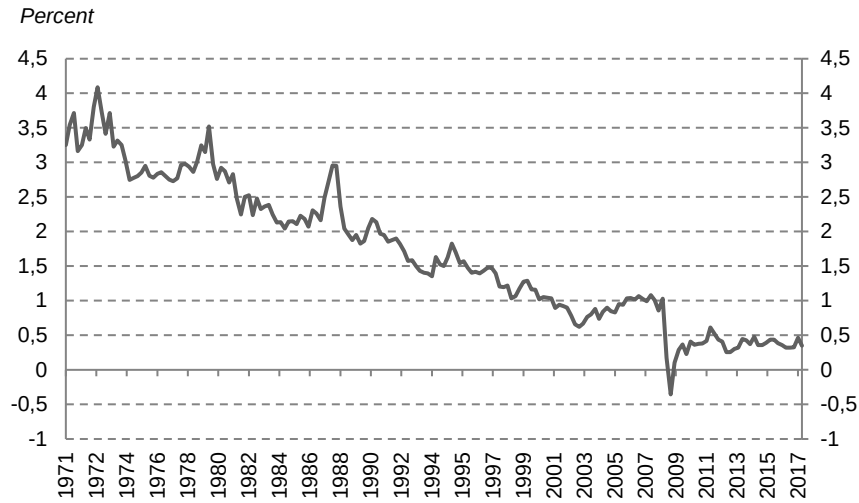
Figure 6.5 Inflation

Percent



Note: Based on annual rate of change in CPI, 1995–2019; five-year moving average.
Sources: National statistical authorities via Macrobond and own calculations.

Figure 6.6 Neutral real interest rates in advanced economies



Note: Neutral interest rates estimated with the Laubach-Williams model, quarterly, 1971–2017. Refers to the level at which the short real interest rate needs to be in order for the economy to reach full resource utilisation and on-target inflation. The estimate regards advanced economies (all OECD economies) as a closed economy on the basis that the countries' aggregated current account balance has generally been around zero.
Source: Rachel and Summers (2019).

Secular stagnation can give rise to a number of macroeconomic problems. It limits the possibilities for using macroeconomic policy to stabilise the business cycle and can lead the neutral real interest rate to fall below the effective lower bound. In this situation, the central bank is prevented from reaching a real interest rate which is sufficiently low to achieve full resource utilisation and inflation on target. A persistent low interest rate situation may also cause problems for financial stability through a "search for yield"-dynamic, through increased risk-taking in financial markets. This is because a lower interest rate means that the yield on financial investments decreases, which in turn puts pressure on the profit margins of financial institutions. To retain a given level of profitability, the actors start to take greater risks, for example, by reducing the share of equity or turning to more risky investments and borrowers. The result will be that the total risk in the financial system, and thus the probability of a financial crisis, increases.

There is a long list of possible causes of secular stagnation; factors which are commonly mentioned are demographics, economic inequality, falling relative prices on capital goods and saving behaviour

in emerging economies.[180] There is no single comprehensive picture of which factors are most important. However, it may be noted that the importance of high saving ratios due to, for example, the demographic development and increased economic inequality, and lower demand for investments, are relatively well-documented.[181]

Which explanations are regarded as most important vary from study to study and may also differ between countries. However, in most countries, there seems to be a combination of different long-term trends that underlie the decrease in the real interest rate. As we previously noted, there are many analysts who anticipate that this situation will return after the present inflationary surge, e.g. because neither demographics, inequality nor the relative prices of capital goods ought to have changed materially in recent years.[182] This development could, however, change if for example Russia's invasion of Ukraine leads to a marked and persistent increase in defence expenditures, or if major investments are made to counteract the effects of global warming. In such a scenario, demand would have structurally increased, either on the private side (in the case of, for example, adaptation measures against rising sea levels), or on the public side (through, for example, increased defence expenditure or extensive government investments in the climate transition).[183]

Based on the above description, it is evident that advanced economies, for at least a decade, have been in the risk zone for secular stagnation. In particular, the west-oriented economies are closely

[180] These explanations of secular stagnation imply that the neutral real interest rate has fallen for reasons that cannot be affected by monetary policy. The neutral real interest rate is something that monetary policy needs to take into account, but cannot affect. According to a recently published theory (Mian et al. 2021), it is instead the case that central banks, by using private borrowing as macroeconomic stimulus, have depressed the neutral real interest rate. The theory, called *indebted demand*, is relatively untested, but has already garnered attention in policy debates. The perspective shares many similarities with Borio et al. (2019), who suggest that monetary policy affects the neutral real interest rate by driving the financial cycle. For example, the interest rate situation is of considerable importance to risk-taking and private borrowing, and the higher the risk propensity and borrowing is, the more sensitive the economy is to the interest rate. Mian et al. (2021) and Borio et al. (2019), however, arrive at different policy conclusions: the latter argue for a monetary policy that takes financial variables into account, while the former argue for a more comprehensive change in economic policy and financial regulation.

[181] See e.g. Auclert et al. (2021), Eggertson et al. (2019), Gagnon et al. (2016), Platzer and Peruffo (2021), Rannenberg (2019), Rachel and Summers (2019), Rana and Thwaites (2016), and Straub (2017). How various factors affect the interest rate is described in appendix 6 of Swedish Fiscal Policy 2021.

[182] Blanchard (2023), Buiter (2023), Calmfors et al. (2022), IMF (2023a) and Rajan (2022).

[183] Such an increase in the public sector's contribution to aggregated demand can be regarded as a potential countermeasure against secular stagnation (see further section 6.2.2 about functional finance policy).

interlinked and therefore jointly affected by the falling interest rates in recent decades. However, there are differences between countries. Secular stagnation among advanced economies can be captured by a scale with three levels:

1) A limited fall in the neutral real interest rate which does not prevent conventional monetary policy from achieving the inflation target and full resource utilisation.
2) A larger decline in the neutral interest rate which means that a conventional monetary policy must be supplemented by unconventional measures (for example, negative policy rates and significant quantitative easing) for the inflation target full resource utilisation to be reached.
3) A marked fall in the neutral interest rate leading the policy rate to frequently be limited by the effective lower bound. The inflation target and full resource utilisation are not achieved even with substantial unconventional measures.

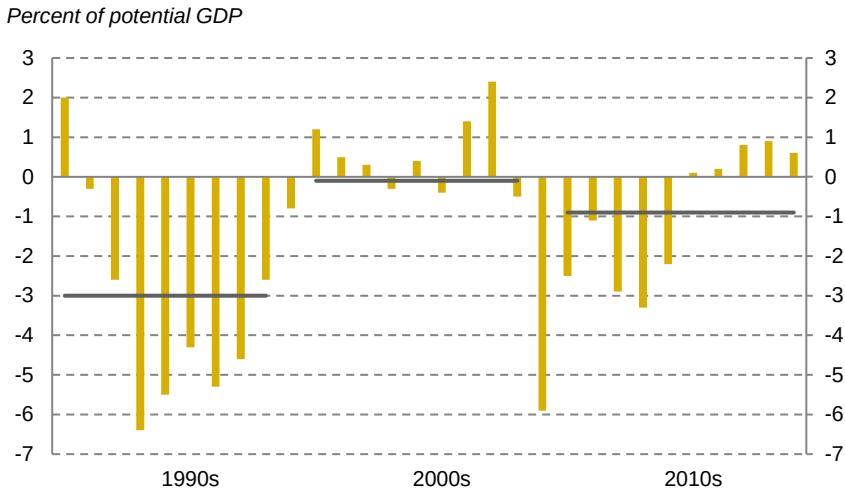
For the next framework review, an assessment is needed on how the real interest rate could conceivably develop over the coming framework period. Given the development of the macroeconomy and monetary policy, Sweden seems to have been at least on the second level for large parts of the 2010s. The neutral real interest rate has been estimated at an average of around -1 per cent during the 2010s[184] and the Riksbank has conducted very expansionary monetary policy to stimulate demand. Despite this, inflation was continuously low and growth not particularly high. The extent to which the third level fits with the Swedish experience depends on what conclusions can be drawn about resource utilisation in the economy.

The most common indicator of resource utilisation is the GDP gap, which gives the ratio of actual and potential GDP. The average GDP gap for the past two decades has been weakly negative, although there is no obvious falling trend (figure 6.7). This runs counter to a trend towards lower resource utilisation. The assessment is complicated, however, by the fact that several of the variables used in estimating potential GDP, for example, equilibrium unemployment and potential employment, may have been affected by the macroeconomic

[184] Armelius et al. (2023).

development in recent decades. A structurally weak demand could lead to a trend towards falling potential employment or higher equilibrium unemployment. Potential GDP would then be lower and limit the fall in the GDP gap, despite the deterioration in demand. The development of the GDP gap thus does not give a clear picture of whether Sweden has been on the third level during the period in question.[185]

Figure 6.7 The GDP gap



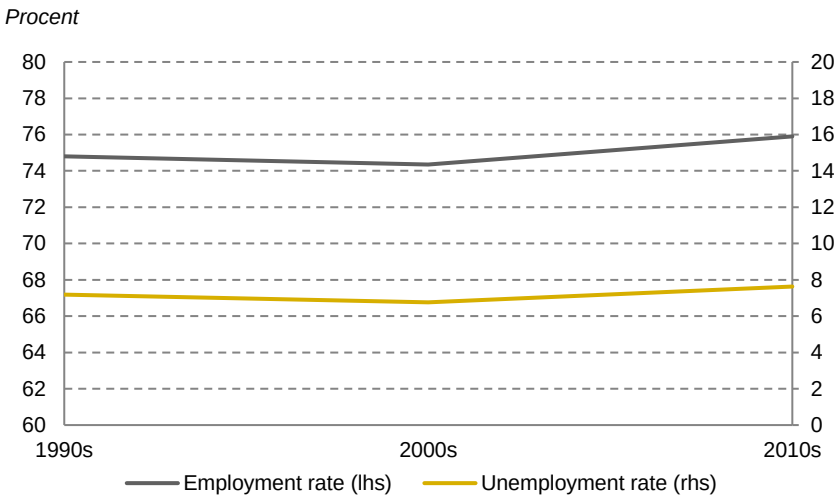
Note: GDP gap per year (bars) and ten-year average (horizontal lines), 1990–1999, 2000–2009 and 2010–2019.
Source: The National Institute of Economic Research's forecast database.

As shown in figure 6.8, there has not been any trend towards a deterioration in neither the employment nor unemployment rate, and thus not in the potential employment rate or equilibrium unemployment rate either. The employment rate has even increased in recent decades. This includes the decade 2010–2019, when Sweden received a large number of refugees who on average were not employed until after a few years. The fact that the employment rate still increased indicates that Sweden, despite the development of the

[185] To illustrate this, compare the GDP gap in the United States before and after the financial crisis. The GDP gap indicates that resource utilisation was just as high in 2008 and 2018, even if the employment rate was nearly 3 percentage points lower in 2018.

neutral real interest rate, has not been at the third level in recent decades.[186]

Figure 6.8 The employment rate and unemployment



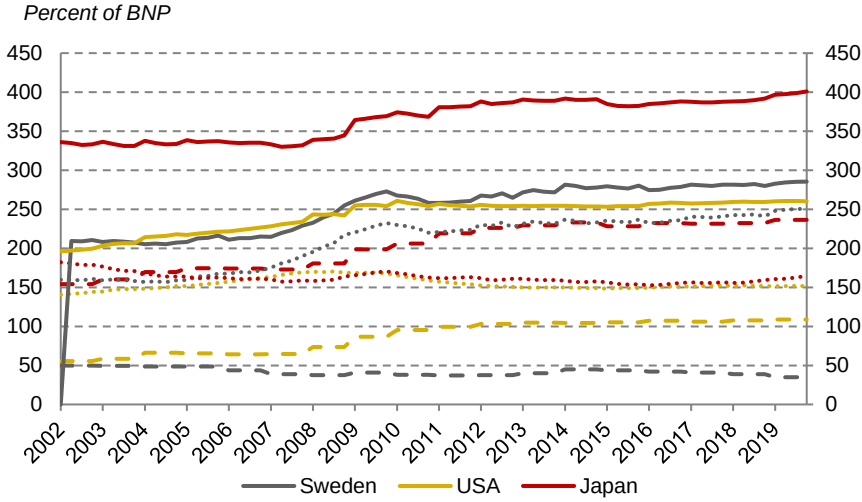
Note: Per cent of labour force and per cent of age group 16–64, respectively. In April 2005, the labour force surveys were re-arranged to harmonise the statistics with the rest of the EU. Statistics Sweden has linked the series from before and after the re-arrangement to make them comparable. However, there remains some uncertainty about comparability. This applies to the data on the employment rate.
Sources: Statistics Sweden, Labour Force Surveys (LFS) and EU LFS via Macrobond

That it seems to have been possible to maintain resource utilisation at a high level is probably linked to the development of private debt. Since the beginning of the 2010s, debt in the private sector has increased by around 50 per cent of GDP and is currently at around 275 per cent (figure 6.9). This is one of the highest levels in the world, and can be compared to just over 190 per cent of GDP in Japan and around 155 per cent in the United States. Given that the low interest rates have contributed to this development, one possible interpretation

[186] The employment rate could have been positively affected by women entering the labour market. The bulk of this shift, however, primarily took place in the 1970s and 1980s (Statistics Sweden), and could also have resulted in a structurally higher unemployment rate if demand had been low in the long term. The development of the unemployment rate speaks against this.

is that the Riksbank has succeeded in achieving full resource utilisation at the price of considerably higher private debt.[187]

Figure 6.9 Debt



Note: Dashed lines are general government debt, dotted lines are private debt and continuous lines are totals.
Sources: BIS and IMF via Macrobond.

To sum up, inflation, GDP growth and the real interest rate in Sweden have decreased, particularly in the most recent decade. This indicates that the neutral real interest rate before the pandemic was considerably lower than it was a number of decades ago. However, this development does not seem to have led resource utilisation to structurally fall below its potential. The GDP gap does not display a falling trend, and neither the employment nor unemployment rate indicate that the potential variables included in the calculation of the GDP gap have had a negative trend. To achieve this has, however, required a very expansionary monetary policy which has contributed to a marked increase in private debt. In light of this, the extent of

[187] Falling GDP growth can also be the result of slower development of potential GDP. The average growth could, therefore, decrease, even if there is consistently full resource utilisation. This could be caused, among other things, by modern innovation not generating the same productivity increases as e.g. electricity, the internal combustion engine, etc. (Gordon, 2015). If such a development dominated, however, inflation should increase, not fall (see appendix 6A).

secular stagnation in Sweden during the decade prior to the pandemic has been closest to the second level on the above scale.

The coming review needs to analyse how the situation may evolve during the next framework period. If the analysis concludes that the neutral interest rate will continue to be low, and that Sweden risks being at level 2 or 3 on the above scale, it may affect what constitutes suitable levels for the target balance and the debt anchor. This is the subject of the following section.

6.2.2 Economic policy under secular stagnation

A discussion has been taking place since the financial crisis in 2008 on which policy measures that should be used when interest rates are persistently low. The following section discusses a number of monetary policy measures which have been emphasised in discussions in Sweden: *negative policy rate, quantitative easing* and *a higher inflation target*.

It has also been discussed whether the pressure on monetary policy should be relieved through an increase in the public sector's contribution to aggregate demand. This fiscal perspective, called functional finance, has not been given the much attention in discussions in Sweden. However, the perspective is relevant for the levels of the fiscal policy framework and is therefore dealt with in more detail in our discussion.[188]

Negative policy rate and quantitative easing have both been used by the Riksbank to increase resource utilisation and achieve the inflation target of 2 per cent. A *negative policy rate* aims at reducing the short interest rate and affecting the economy through the same channels as ordinary monetary policy. What makes the measure unconventional is that it has previously been assumed that the nominal effective lower bound is zero.[189] However, empirical research indicates that policy rate reductions below zero in Sweden, the euro area and Japan, among

[188] See e.g. Calmfors et al. (2022) for a more detailed discussion of monetary policy options.

[189] A negative policy rate could, on the one hand, cause cash (which *de facto* have a nominal interest rate of zero per cent) to become a comparatively attractive form of saving, if banks transfer the negative interest rate onto their customers. This may in turn injure the legitimacy of the payment system among the population and lead to financial instability, as people begin to pull their funds out of bank accounts (Buiter, 2020). If banks, on the other hand, do not transfer the negative interest rate onto their customers, their own equity and lending capacity could be negatively affected, meaning that an interest rate reduction below zero has a contractionary rather than expansionary effect(called a reversal rate of interest by Brunnermeier and Koby, 2018).

other places, have had the intended effect on market rates.[190] There is thus probably some scope to reduce policy rates below zero, even if it is relatively limited.

Quantitative easing (QE) stimulates the economy through central bank asset purchases, often government bonds with a relatively long maturity. When this has been done for a monetary policy purpose, the aim of the measures is to reduce the *long* interest rate.[191] This effect is achieved through partly different channels than conventional monetary policy.[192] According to research, it is relatively clear that QE reduces the long interest rates when the purchase is announced and implemented.[193] However, the extent to which the purchases affect bond rates and the economy in the somewhat longer term, and the effect that this has on resource utilisation and inflation, is a matter of dispute.[194]

Critics also argue that QE contributes to increased risks in the economy.[195] For public finances, the asset purchases mean that the central bank risks losing its capital, and needing subsequently needing a capital injection through the central government budget, if interest rates should start to rise. The ongoing increase in interest rates led, for example, to the Riksbank losing SEK 81 billion during 2022. It may therefore be expected that the Riksbank will request the Riksdag for a capital injection in the near future.[196] As we described above, lower interest rates generally lead to a growth of private economic actors' balance sheets by increasing asset prices and debt. This development

[190] Erikson and Vestin (2019), Hartmann and Smets (2018) and IMF (2017). That negative policy rates have been possible may be due to the impracticality of storing cash and using it in any larger transactions. It may also be due to banks being able to compensate for the loss of income following negative interest rates by using other methods than transferring the negative interest rates onto their customers (Buiter, 2020).

[191] The aim of the measure depends on whether it is taken during a crisis or not. Asset purchases during a financial crisis is often intended to stabilise liquidity on important financial markets. Our analysis here concerns QE outside of financial crises.

[192] That the central bank purchases large volumes of government bonds may e.g. signal to the market that policy rates will remain low for a long time. The most important mechanism, however, is the portfolio balance channel. The central bank's purchases of e.g. government bonds reduce the available stock on the market, causing the prices of bonds to rise, the interest rates to fall, and investors to move to assets with more risk. Long-term and more risky loans thus become cheaper, leading to growing private debt, higher asset prices, higher demand and increased economic activity.

[193] For example, Gagnon et al. (2011), Joyce et al. (2011), D'Amico and King (2012) and Cahill et al. (2013).

[194] For example, Wright (2011).

[195] For a more exhaustive discussion of criticisms of QE, see Calmfors et al. (2022).

[196] See appendix 3 in Swedish Fiscal Policy 2021 for a more thorough description of the connections between the central government budget and the balance sheet of the Riksbank.

may entail an increased vulnerability to financial and macroeconomic shifts. The mortgage taker with a debt of SEK 2 million owes the bank SEK 2 million regardless of the change in value of the dwelling financed by the loan.[197] This means that the mortgage taker's net wealth will decrease in the event of a fall in the value of the dwelling. Higher interest rates after a period of very expansionary monetary policy could therefore have major consequences, especially for heavily indebted households and businesses, and ultimately also for the economy as a whole.

Another proposal in the discussion in recent years has been to *raise the inflation target*. An inflation rate of around 3 or 4 per cent would mean that the policy rate would be at a higher level in a normal situation. This would in turn mean that the central bank has greater scope to reduce the interest rate, either in the event of a recession or to counteract a structurally low resource utilisation. Advocates of a higher inflation target indicate a number of benefits compared with e.g. QE. In the first place, it is clear how much policy space the measure would create. Secondly, a higher inflation target, unlike QE, would not risk inflicting losses on the central bank's balance sheet.

One objection to a higher inflation target is that there are no guarantees that it would be achieved. For example, the Riksbank, the ECB and a number of other central banks have not succeeded in reaching their targets of 2 per cent during the past decade, despite negative interest rates and extensive asset purchases. It is thus not a given that an increase of the goal to 3 per cent would automatically lead to a higher rate of inflation.[198] Another objection is that a change in the inflation target could damage the credibility of the target.[199]

A fiscal alternative (or complement) to the monetary policy measures described above is what is usually referred to as functional finance.[200] Put simply, this means that the general government sector relieves the pressure on monetary policy by increasing its contribution

[197] In such a scenario, the market value of mortgages also falls. Depending on the model used for the interest differential compensation in Sweden, it could be possible for households with fixed mortgages to replace a high debt with a lower debt when the interest rate rises.
[198] The ability to reach a higher target could be improved by carrying out increases when inflation is receding during the ongoing inflation episode, or coordinating the change with the wage movement (Calmfors et al., 2020).
[199] See Bernanke (2022) for a further discussion of the problems involved in raising the inflation target.
[200] The term was coined by Lerner (1943) and recently used by e.g. Blanchard (2023). The same argument has been made by e.g. Furman and Summers (2020) and Rachel and Summers (2019).

to aggregated demand during periods with a low neutral real interest rate. Unlike both conventional and unconventional monetary policy, it is increased public sector debt that is used to compensate for the structurally low private demand.[201]

The ability of fiscal policy to affect aggregate demand and interest rates under secular stagnation has been studied by a number of economists in the United States. The research literature indicates that the United States' expansionary fiscal policy in recent decades has contributed to mitigating the decrease in the neutral real interest rate both in the United States and in other advanced economies.[202] On average, estimates indicate that the US neutral real interest rate rises by around 0.4 percentage points for every per cent of GDP that net lending is reduced, and by 0.035 percentage points for every per cent of GDP that general government debt increases.[203] According to these estimates, a reduction of the structural balance by around 2.5 per cent is required to increase the real interest rate by one percentage point. The level of the structural balance can thus be part of the explanation why the US policy rate and inflation has been generally higher than in, for example, Europe.[204] The issue is, however, whether extent the same logic applies to a small open economy.

In economic discussions, it is sometimes assumed that the neutral real interest rate is the same in all countries. This is a reasonable approximation in the long term,[205] but differences may exist in the short and medium-term, among other things, depending on the fiscal stance. For example, the average real interest rate during the period 2015–2019 was around 0.8 in the United States, -0.4 in Sweden and -0.7 in Japan.[206] Whether fiscal policy is able to increase aggregate

[201] In the report Swedish Fiscal Policy 2021, we discussed how fiscal policy should relate to the very limited ability of monetary policy to parry fluctuations in the business cycle when the interest rate is very low. We concluded that fiscal policy might need to take on a more active stabilising role going forward, and that it is therefore probable that public debt would vary more over the business cycle. The business cycle perspective, however, is of limited importance to the framework's balance and debt levels, as the framework allows borrowing to vary over the business cycle. The issue that is important to the framework is the level of public borrowing in a structural perspective.

[202] Eggertson et al. (2019) and Rachel and Summers (2019).

[203] See Rachel and Summers (2019) for a research summary. See e.g. Fischer (2016), Gale and Orzag (2003) and Laubach (2009) for individual estimates.

[204] The average net lending of the United States in the 2010s was around -6 per cent (IMF, via Macrobond).

[205] See the in-depth section 5.1 in Calmfors et al. (2022).

[206] Macrobond. Note that differences in the real interest rates may reflect expectations of changes in exchange rates, or differences in the average business cycle.

demand through the mechanisms described above, depends on the combined macroeconomic effect of functional finance and the monetary policy response, which in turn depends on where the economy is on the scale laid out in the previous section. For a country at level 2 on the scale, where we placed Sweden, functional finance could affect the economy by raising resource utilisation above its potential and creating an inflationary pressure in the economy at the prevailing policy rate. The Riksbank therefore needs to raise the interest rate, which dampens households' and businesses' demand and strengthens the exchange rate. The inflationary pressure is reduced and GDP returns to the same level as before the re-arrangement of fiscal policy. During the period with a lower target balance, aggregate demand and inflation are unchanged, while the exchange rate and the policy rate are higher. At this point, fiscal policy has succeeded in raising the neutral interest rate. However, there are a number of possible objections to this line of reasoning.

A first objection is that the correlation between public demand and the level of interest rates could be weaker in a small open economy than in, for example, the United States. Small open economies generally have a smaller share of domestic demand, which could mean that the initial stimulus of a reduction in the target balance is weaker than in a large economy. This would mean that the correlation between the general government budget balance and the level of interest rates is weaker than would be indicated by the American studies referred to above, with the consequence that the balance target would have to be sharply reduced to have a sizeable effect. This is a considerable uncertainty about functional finance in small open economies.

Another objection is the Ricardian equivalence hypothesis (RE). Higher debt through lower net lending does not, according to this hypothesis, lead to higher aggregate demand if the economic actors internalise future tax increases into their expectations. When this is the case, general government demand squeezes out private demand, which reduces the multiplier effect of the fiscal expansion. Functional finance thus becomes an ineffective way of conducting macroeconomic stabilisation as demand, and thus the neutral real interest rate, can only be affected in the very short term. The empirical support for RE in the short and medium term is weak, however.

A third objection is that the effect on demand of the lower target balance would decrease as the created fiscal space is being taken up by

higher interest expenses. To the extent that these interest expenses pass to foreign lenders or persons with a low propensity to consume, aggregate demand will decrease as the higher debt servicing burden crowds out other government expenditure. To achieve full resource utilisation and the inflation target, the Riksbank would have to reduce the policy rate, which would be equivalent to the effects of the functional finance having dissipated. The length of time this process takes depends on the relative size of the increases of interest expenses and budget space, which in turn depends, among other things, on public sector net wealth and the development of the interest rate-growth differential.[207] The persistence of the effect on demand is thus another uncertainty about to functional finance in open economies.

A fourth objection is that a fiscal policy that leads to a trend towards increasing public debt risks giving rise to so-called bad equilibria. Investors start to question the sustainability of a country's public finances, which raises the risk premium on the country's bonds, leading to a further deterioration in sustainability, and so on (section 6.1). The occurrence of bad equilibria in the event of high public debt is a well-documented phenomenon, although the risk is most probably limited in Sweden as long as the debt is low and the integrity of the fiscal policy framework is maintained.

6.2.3 Concluding comments

Inflation is high and interest rates have increased sharply during the past year. In light of this development, the hypothesis of secular stagnation could appear to have lost its relevance. At the same time, there are reasons to believe that the macroeconomy will revert to the same pattern as before the pandemic once the ongoing inflationary period is over, as many of the underlying driving forces remain in place. A development of this kind is significant for fiscal policy and it is important to take this into account in the next review of the framework.

The hypothesis of secular stagnation accords relatively well with the development of the Swedish macro economy, particularly during the 2010s. Inflation and growth have not increased despite a sharp fall in interest rates. A reasonable interpretation is that the neutral real

[207] In-depth box 6.2 analyses how temporary changes (shocks) to the interest rate growth differential affects the development of public debt.

interest rate has decreased, and that monetary policy has therefore needed to introduce a new repertoire of expansionary measures to be able to reach its goals. A situation with a low neutral real interest rate may have negative consequences as it would make it more difficult for central banks to stabilise cyclical fluctuations, GDP development could become persistently weak and the risk of financial crises would increase.

Against this background, a number of policy alternatives have been proposed which are available to governments and central banks. Some examples, which have been used or discussed in Sweden are quantitative easing, negative policy rate, a higher inflation target and a lower target balance (functional finance). We consider all four alternatives to have advantages and disadvantages, and a more in-depth analysis is required than the one contained in this section to determine which policy mix is best to meet the challenges of a possible return to secular stagnation. It is of particular importance for the next framework review whether a lower balance target can be part of the solution.

Research studies in the United States indicate that lower general government net lending may contribute to increase demand and to raise interest rates, at least in the medium term. It has not, however, been clarified how these conclusions apply to a small economy such as Sweden, and there are at least two aspects to consider. One of these concerns how large a reduction of the target balance would be needed to have a meaningful impact on the neutral real interest rate, and how persistent the effect would be.

If a one-off reduction of the target balance during a framework period is assessed as providing a significant and lasting effect over the course of a framework period, then functional finance seems a reasonable countermeasure to consider if problems with interest rates around the lower bound return. If the effect is regarded as relatively small, however, or is thought to dissipate after a year or two, functional finance is a weaker reason for a lower target balance. If it is possible to establish higher interest rates through functional finance, it is also important to consider whether the risk of financial imbalances would decrease. These issues need to be investigated further during the review for the next framework period.

In-depth box 6.2 Shocks to GDP growth and interest rates have a relatively small effect on general government finances

Functional finance may create risks if debt is permitted to become very high. In this in-depth box, we analyse how sensitive the Swedish Maastricht debt is to shocks to GDP growth and interest rates by using stochastic sustainability calculations. Based on the historical appearance of shocks, these calculations provide a probability distribution of how future shocks will affect the development of debt.[208] The result does not capture all existing uncertainty but only uncertainty associated with the interest-growth correlation. The calculations are based on the method used by the European Commission and applied to NIER's base scenario.[209] Shocks to GDP growth and the interest on the Maastricht debt are added to NIER's base scenario. The yield on central and local government interest-bearing assets is assumed to be affected by shocks in the same way as interest on the Maastricht debt. The size of the shocks is determined based on the situation in Sweden between 1987 and 2021. The calculations are a partial analysis: the primary net lending, the development of the old age pension scheme and asset increases that must be financed by loans is the same as in NIER's base scenario.[210] This means that economic policy need not be adapted when the interest rate-growth correlation changes.

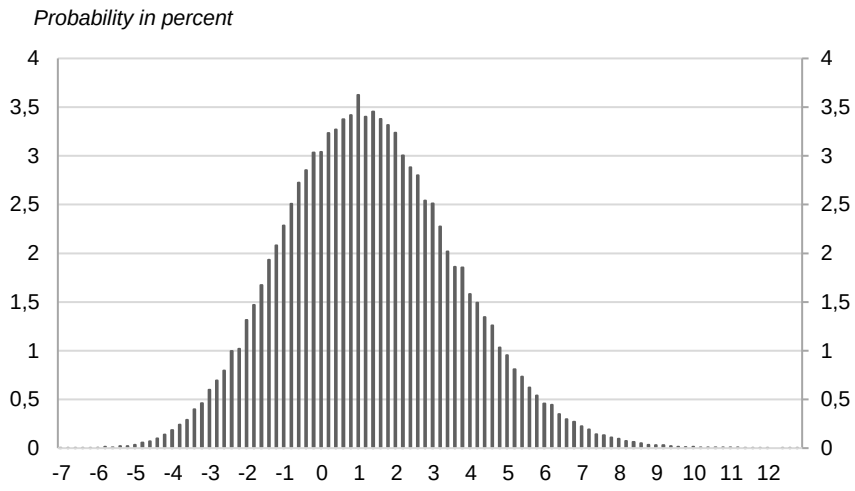
The calculations show the distribution of the Maastricht debt around NIER's base scenario for 2050 (figure 6.10). With 80 per cent probability, the debt will be within -2 to +4 percentage points around the base scenario. When the debt deviates from the base scenario, this is because the balance target was not met. When the debt is higher (lower) than in the base scenario, shocks have led the target balance to be undershot (exceeded) on average.

These calculations present a relatively narrow confidence interval around the debt. This is due to several factors. One such factor is the relatively stable development of the Swedish economy and general

[208] Similar calculations were used in European Commission (2023) and is included in IMF (2022), which presents their new framework for analysis of the sustainability of public finances. In the European Commission's proposal for a new framework for economic governance, there are also stochastic sustainability calculations for the assessment of country-specific adaptations to desirable levels of debt (in-depth box 6.1). This is in line with the recommendations of Blanchard et al. (2021).
[209] The European Commission (2014).
[210] The calculations are described in appendix 6B.

government finances in the past 35 years. This has led to relatively small shocks in the interest rate-growth correlation and also a positive correlation between interest rate and growth; when the interest rate has changed, growth has on average changed in the same direction, so that the difference between the interest rate and growth has not been greatly affected. Another factor is that the stock of the public sector's interest-bearing assets are approximately as large as the Maastricht debt, which to a great extent neutralises the effects of changes in the interest rate-growth correlation (section 6.1).

Figure 6.10 Effects on the Maastricht debt in 2050 from uncertainty about the development of GDP and interest rates



Note: The X-axis shows the deviation from the Maastricht debt in NIER's (2022) base scenario in 2050, as a per cent of GDP. 100,000 simulations based on the variation in the change of GDP growth and the change in central government debt interest respectively, including the covariance between them during the period 1987–2021. See appendix 6B for a description of the calculations.
Source: Own calculations.

6.3 Conclusions

The issue of the shape and form of fiscal policy is continuously relevant in the economic policy discussion. In this chapter, we have given attention to a number of issues which are important to the specifications of the fiscal policy framework. Our hope is that the chapter will contribute to a general discussion about the design of

fiscal policy, and that it will also be able to serve as a reference for the next framework review.

In the first section of the chapter, we assumed "normal conditions", where monetary policy can conduct stabilisation of cyclical fluctuations unhindered by the effective lower bound. In this situation, temporarily high public investment during the framework period could justify a lower target balance and a higher public debt. An investment bulge of this kind could be a consequence of changes in the surrounding world justifying higher investments than normal, or that investments in certain areas have previously been too low. We argued in last year's report that there may be a need for extensive investments related to the climate transition in the future. This is an issue that needs to be clarified. It was not dealt with in the previous review and knowledge on the subject is insufficient. Another area where major investments have been announced is the armed forces. The build-up has been ongoing for a number of years now and the pace will probably have to increase in the years to come.

Even if a persistent increase in the level of ambition does not justify higher debt *per se*, there are reasons to analyse whether investments will be particularly high during the next framework period. At the time of the review, there will also be a new infrastructure plan for the period 2026–2037. If the levels of investment in the plan are unusually high, this needs to be considered in the choice of balance and debt targets. Furthermore, we find that Sweden's public sector finances are relatively insensitive to interest rate changes on the Maastricht debt. This is mainly explained by the central government's considerable interest-bearing assets, the interest rates on which will usually be affected when the government bond rate changes. This is, of course, also means that changes in the interest rate-growth differential have limited direct effects on general government finances.

In the second section, we instead assume the less normal conditions that prevailed during the decade before the pandemic, when inflation and growth were relatively low at the same time monetary policy was restricted by the low level of interest rates. We analyse the industrialised world's, including Sweden's, economic development on the basis of the hypothesis of secular stagnation, and discuss whether the trend of falling interest rates may be explained by a structural deficit of private demand. The expansionary monetary policy conducted during the 2010s, with a negative policy rate and

quantitative easing as main tools, may be regarded as an attempt to maintain a private demand that is compatible with full resource utilisation and inflation around the target. However, these aims could be pursued with other means, for example a higher inflation target or a lower target balance, so-called functional finance. Research related to the US economy indicates that functional finance may be an effective way to counteract secular stagnation. The extent to which these conclusions are applicable to a small open economy such as Sweden is, however, unclear for at least two reasons. The first reason is that the impact of the policy on demand could be different because the proportion of domestic demand in a small open economy is often lower than in, for example, the United States. The second reason is that the persistence of the effects on demand has not been clarified. Further investigation in these two areas is required.

Appendix 6A: Explanations for the trend of falling interest rates

In section 6.2, it is described how the hypothesis of secular stagnation provides an explanation for how low interest rates, low growth and low inflation can occur at the same time for long periods. The hypothesis can have implications for fiscal policy, particularly for the average level of the budget balance and debt. The Council therefore believes that the coming review needs to assess the probability that the next framework period will be characterised by secular stagnation. However, there are other theoretical explanations, beyond secular stagnation, for the falling real interest rates. This appendix describes a number of such explanations:

- that the industrial world fell into a 'liquidity trap' as a consequence of the financial crisis,
- that the deficit in private demand is cyclical and can be explained by a process of "deleveraging" following the increase in private debt before the financial crisis,
- that the average investor has become more risk averse,
- that growth has slowed because modern innovation has relatively small productivity effects,
- that low inflation and low interest rates depend on globalisation pushing down prices on many goods,
- and that the modern economy is dominated by industries where competition is low and the incentives to invest are weak.

That low interest rates after the financial crisis were caused by a liquidity trap has been a relatively common hypothesis.[211] The basic idea originates from Keynes and describes a situation where the interest rate has fallen to such a low level that people's preference for liquidity completely dominates their saving behaviour.[212] In this situation, the majority prefers to keep cash rather than lend their money out because the interest rate is too low. A further reduction in the interest rate

[211] Eggertson and Krugman (2012).
[212] Keynes (1936).

therefore has no effect on lending, which restricts the central bank's ability to push the economy in an expansionary direction. In a modern financial economy, the liquidity trap is expressed by the central bank's interest rate cuts (or asset purchases) having no effect on the banks' lending to households and businesses. This leads inflation and growth to continue being low despite the reduction in the interest rate. This description accords well with experiences from the United States in the years just after the financial crisis, but does not fit the development in Sweden, where private debt has continuously increased.

A related hypothesis is that *the low level of demand depends on remaining private debts from the financial crisis*.[213] is the core of this hypothesis is that debt increases and decreases in a cyclical manner, and that the years after the financial crisis constituted a so-called deleveraging cycle. Households and businesses used resources to pay off their debts, reducing demand and necessitating lower policy rates. The low level of demand thus led to a reduction in interest rates, while growth and inflation remained low. An implication of this hypothesis is that the demand deficit is temporary and that interest rates will be normalised as debts are paid down. This hypothesis accords well with the development of private credit in the United States; debt as a proportion of GDP fell among households and businesses during the first years after the financial crisis (figure 6.9, section 6.2). However, this perspective does not explain why the fall in the neutral real interest rate started at least 15 years before the financial crisis broke out, nor why interest rates continued to fall in many countries where private debt, unlike in the United States, continued upwards after the crisis. This indicates that the increase in private debt was caused by structurally weak private demand rather than the other way around. In this view, the observations of the deleveraging hypothesis can be regarded as symptoms of secular stagnation: private demand is weak, inflation is low, central banks reduce their policy rates to lift inflation, which causes private debt to increase. A financial crisis occurs which, through falling asset values, leads to a dramatic deterioration of households' net wealth, and households respond by starting to repay their debts. Demand, inflation and growth will be weak until debt, either in the private or the public sector, starts to increase again.

[213] Rogoff (2016).

Another hypothesis is that *the explanation for the low interest rates can be found in investors' average risk propensity*. The growth and increases in expected lifespan in China and South-East Asia, the financial crisis in 2008 and financial regulation have increased demand for safe assets, in particular government bonds. This has led the average risk premium – i.e. the compensation which the investor receives for the risk taken – to increase, which in turn has made the difference in yield between safe and unsafe assets more substantial.[214] An illustrative example is that the average dividend on equity has remained unchanged at around 6–7 per cent while the safe interest rate, i.e. the yield on government bonds, has fallen sharply.[215] Assuming that the yield on equity corresponds to the sum of the secure interest rate and a risk premium, while the safe interest rate has fallen, this indicates that the average risk propensity among investors has decreased. There is an empirical relationship that complicates this analysis, however. Interest rates on e.g. housing bonds of various quality have followed the development of government bond yields very closely.[216] In light of this, there could be another explanation for the continuity of the return on equity, such as the pervasiveness of markets with monopolistic characteristics (see below).[217]

A further explanation for the trend of falling interest rates is *that growth has slowed because modern innovations have relatively small effects on productivity*.[218] This is sometimes called "supply driven secular stagnation" (compared with demand-driven secular stagnation, as discussed in section 6.2). The basic idea is that modern innovations do not generate growth to the same extent as the major breakthroughs of the 19th and 20th century. The steam engine, the railway, the internal combustion engine, electricity etc. generated increases in welfare and productivity which cannot be compared with, for example, the effects of smartphones or modern computer software. Other secular supply trends, not least the demographic development in advanced economies, intensify this trend. It seems likely that part of the diminished trend of GDP growth since the 1950s can be derived from

[214] Caballero et al. (2017) and Gomme et al. (2015). See Eggertson et al. (2019) and Barkai (2020) for counter-arguments.
[215] For example, Caballero et al. (2017) and Reis (2022).
[216] Rachel and Summers (2019)
[217] Eggertson et al. (2019) and Barkai (2020).
[218] Gordon (2015).

supply factors of this kind.[219] A weakness of this hypothesis is that its implications for inflation, given the trend toward falling interest rates, do not coincide with what we have seen. If supply stagnates at the same time as the central bank endeavours to stimulate demand, the economy should become overheated and inflation exceed the target. This does not accord with the empirical experience since at least after the financial crisis in 2008.

An explanatory model that goes in the opposite direction – i.e. which ascribes the falling interest rates to a positive instead of a negative development of supply – concerns the effects of globalisation on global pricing. Since the 1980s, China and virtually all southern and south-eastern Asian countries have opened their economies to the outside world. This has dramatically increased the supply of cheap products and labour available to international businesses. One effect of this development is that businesses have been able to push prices down on their goods and services, which has in turn slowed the rate of price increases. Inflation has become lower, leading central banks to reduce interest rates to achieve their inflation targets. The result has been lower inflation and lower interest rates. This hypothesis is supported by a number of research papers.[220] However, the most recent research indicates that the effect is limited and has not played a crucial role for the development of underlying inflation.[221] A weakness in this explanatory model is that the combination of cheaper production and lower interest rates should lead to higher growth. This does not accord with development of industrialised economies in recent decades.

There is an additional explanatory model based on globalisation which draws the opposite conclusions on its implications for supply. The argument is that *the effect of the globalised market on competition in many cases has been negative, not positive, as it has enabled a few multinational companies to grow and buy up potential competitors.*[222] A development of this kind leads to less competition and higher corporate profits, which could be a contributing factor to the increased difference in yield between shares and bonds (see above). The trend has been intensified by several new markets, for example, for social networks or browsers, which can be regarded as natural monopolies or oligopolies since the value of the

[219] Gordon (2016).
[220] For example, Auer and Fischer (2010) and Auer et al. (2017).
[221] For example, Venditti et al. (2021) and Nickel (2017).
[222] Mankiw (2022), Barkai (2020) and Eggertson et al. (2019).

services for the consumer is determined by how many already use them. A consequence has been that the incentives to invest have decreased at the same time profit margins have increased. This has in turn led to slower growth and falling interest rates. An inadequacy of the hypothesis is that less competition should reduce the downward pressure on prices, increase corporate profits and lead to higher inflation. And as we know, the latter has not been the case.

To sum up, there are a number of hypotheses in addition to secular stagnation which attempt to explain the trend of falling interest rates. Reality probably contains elements of all the above perspectives, but secular stagnation stands out by offering a coherent explanation of how growth, interest rates and inflation can be low or fall at the same time for long periods. It accords at a general level with empirical observations and is relevant to fiscal policy. This hypothesis should therefore be given special attention in the framework review.

Appendix 6B: Calculation methods

The calculations presented in the chapter are based on NIER's most recent sustainability report.[223] On the basis of NIER's base scenario, the Maastricht debt is expressed in the following equation in the calculations:

$$s_t = \frac{1 + r_t}{1 + g_t} s_{t-1} - ps_t - r_t^a a_t - ki_t + to_t$$

where *s* is the Maastricht debt as a proportion of GDP, *r* is the interest rate as paid on the debt, *g* is the nominal GDP growth, *ps* is primary net lending as a proportion of GDP, *a* is the interest-bearing assets held by the central and local government sector as a proportion of GDP, *ra* is the yield on the mentioned assets, *ki* is net income from the public sector's remaining assets in proportion to GDP and *to* is asset increases financed by loans in proportion to GDP.[224] The scenarios presented in this chapter are partial analyses where one assumption at a time has been changed and only direct effects are included in the calculations. These calculations shall thus be treated with caution. NIER's base scenario was produced before the war in Ukraine broke out and therefore does not capture the economic development, with high inflation and an increasing policy rate, which has taken place since then. Moreover, considerable uncertainty is attached to statements about several decades in the future.

Calculations in section 6.1

Figure 6.1 shows the effect of a changed balance target. In the calculations, primary net lending is adjusted so that general government net lending is in line with the assumed target level from 2023 and onwards.

Figure 6.2 shows the effect of a different rate of interest on the Maastricht debt. In those calculations, the interest rate on the Maastricht debt, *r*, is 2 percentage points higher or lower from 2023

[223] For more information, see chapter 1 as well as appendices 4 and 5 in NIER (2022).
[224] See Fiscal Policy Council (2021), appendix 5.

and onwards, and r^a is affected in a corresponding way.[225] Furthermore, we present calculations where only the interest rate on the debt is affected.

Calculations in section 6.2

The stochastic sustainability calculations are based on a method developed by the European Commission.[226] Normally distributed shocks with the average value 0 are added to the deterministic path in NIER's base scenario in such a way that the shocks in the simulated data show the same variation as the shocks observed in the actual series for 1987–2021. These shocks are defined as change in the growth rate of nominal GDP and change in the interest rate on the Maastricht debt between two years, respectively. As the Maastricht debt has only existed from 1996, and since we wish to include the crisis in the 1990s in the calculations, we approximate the interest rate on the Maastricht debt with the five-year government bond rate.[227] The variance in both series and the covariance between them has been calculated for the two series. The shocks originating from nominal GDP growth have during 1987–2021 had a variance of 11.7. During the same period, the variance for shocks originating from the five-year government bond yield was 2.1 and the co-variance between the two shocks was 4.6.

Based on the size of the Maastricht debt in 2022 and the path for primary net lending, the general government's residual net capital income, i.e. excluding central and local government interest-bearing assets, and asset increases that must be financed by loans for 2023 and onwards, 100,000 simulations have been made in which shocks were added to the variables in every period. The calculations are a partial analysis, such that the effect of automatic stabilisers on primary net lending is not taken into account. The calculations shall therefore be interpreted with caution.

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[225] The old-age pension system's assets are also affected by changes in the interest rate, but that effect is visible only in the public sector's net wealth, and not in the Maastricht debt (see appendix 5 in the Swedish Fiscal Policy Council, 2021).

[226] See European Commission (2014) and Berti (2013).

[227] Statistics on the Maastricht debt are available only from 1995 onwards, meaning that analyses of the interest rate of the Maastricht debt can only be made from 1997 and onwards. For 1997–2021, the shock for the interest rate on the Maastricht debt had a variance of 1.6, and the covariance with the shock on GDP growth is 2.1. Corresponding figures for the five-year government bond is 0.9 and 2.6, respectively.

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Glossary

Acyclical fiscal policy
The structural balance, as a proportion of GDP, does not covary with the business cycle.

Automatic stabilisers
Variations in tax receipts and public expenditure that depend on variations in the business cycle, without needing new political decisions to be made.

Boom
When the GDP gap is positive.

Business cycle
Variations in the GDP gap.

Contractionary fiscal impulse
Increase in the structural balance.

Contractionary fiscal policy
Structural balance above the surplus target.

Countercyclical fiscal policy
When the structural balance is above (below) the surplus target in a boom (recession).

Debt anchor
Guideline for the Maastricht debt. Amounts to 35 per cent of GDP ± 5 percentage points.

Demand shock
An event affecting quantity (GDP) and prices (inflation) in different directions.

Discretionary fiscal policy
Active fiscal policy measures; typically approximated by analysing changes in the structural balance as a proportion of potential GDP.

Equilibrium unemployment
The level of unemployment which, in the long term, is compatible with the inflation target.

Expansionary fiscal impulse
Decrease in the structural balance.

Expansionary fiscal policy
Structural balance below the surplus target.

Fiscal impulse, The
Changes in the structural balance; the impulse may be expansionary, contractionary or neutral.

Fiscal policy framework
Described in the Fiscal Framework Communication, Govt Comm. 2017/18:207. Comprises law and practice concerning the budget process, surplus target, expenditure ceiling, debt anchor and the balance requirement for local government.

Fiscal policy intentions
Fiscal policy based on the information (e.g., forecasts) available at the time the decisions are made (ex-ante).

Fiscal policy outcomes
Fiscal policy such as it can be measured in retrospect, e.g. when information about the business cycle is available (ex-post).

Fiscal stance, The
The level of the structural balance in comparison to the surplus target; this may be expansionary, contractionary or neutral.

Functional finance
A higher public contribution to aggregate demand during periods with a low neutral real interest rate.

GDP gap
The difference per cent between actual and potential GDP.

Lower interest rate bound

The lowest nominal policy rate which a central bank believes is possible without undesirable effects.

Maastricht debt

Consolidated gross debt in the public sector. The sum of debts in central and local government as well as in social security funds (old-age pension systems), less intra-sector debt.

Net lending

The lending of the public sector (central government, municipalities and regions), measured as a proportion of GDP.

Neutral fiscal policy

When the fiscal policy is neither acting to expand nor contract demand.

Neutral real interest rate

The real interest rate which is compatible with full resource utilisation and the inflation target.

Potential GDP

The GDP level which in the long term is compatible with an inflation in line with the inflation target.

Procyclical fiscal policy

When the structural balance is below (above) the surplus target in a boom (recession).

Quantitative easing

Asset purchases by central banks that aims to stimulate the economy by lowering the long interest rates, or strengthening the liquidity of financial markets during financial crises.

Real disposable income

Disposable income deflated by consumer prices (purchasing power).

Real interest rate
Nominal interest rate adjusted for expected inflation.

Recession
When the GDP gap is negative.

Secular stagnation
A macroeconomic condition where structural private demand is weak, leading to a falling neutral real interest rate to very low levels.

Structural balance
Net lending less automatic stabilisers, measured as a proportion of potential GDP.

Surplus target
Net lending shall amount on average to 1/3 of GDP over a business cycle.