Swedish Fiscal Policy

Fiscal Policy Council Report 2020

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. The report is used by the Riksdag as a basis for its evaluation of the Government's policy. The Council also arranges conferences. In the series 'Studier i finanspolitik' (Studies in fiscal policy), it publishes in-depth studies of different aspects of fiscal policy.

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Foreword

The Fiscal Policy Council is tasked with monitoring and analysing fiscal policy. The Council also aims to promote more public debate in society about economic policy.

The Council consists of six members. Since the previous report in May 2019, the appointments of Peter Englund and Bertil Homlund have come to an end. Lina Aldén and Pär Österholm are new members of the Council.

The Council is assisted by a secretariat consisting of Joakim Sonnegård (Head of Agency), Niklas Frank (Deputy Head of Agency and Senior Economist), Christina Håkanson (Senior Economist), Axel Malmcrona (Research Assistant) and Charlotte Sandberg Gavatin (Head of Administration).

This is the Council's thirteenth report. The analytical work was completed on 5 May. The Council has commissioned two background papers that will be published in the Council's publication series, *Studier i finanspolitik* (Studies in fiscal policy):

- Georg Graetz Technological Change and the Swedish Labor Market
- 2. Markus Sigonius Stress test of the long-term sustainability of the public finances

We have received many valuable comments. We would like to join with the whole of the secretariat in thanking, Mats N Andersson, Karl Bergstrand, Urban Hansson Brusewitz, Lars Calmfors, Erika Färnstrand Damsgaard, Mats Dillén, Thomas Eisensee, Per Englund, Tomas Forsfält, Georg Graetz, Niklas Halén, John Hassler, Johanna Heden, Göran Hjelm, Karolina Holmberg, Lars Jonung, Gabrielle Larsson, Philip Löf, Marcus Mossfeldt, Kristian Nilsson, Jonas Norlin, Jan Olsson, Karine Raoufinia, Cecilia Renmyr, Karolina Riedel, Elin Ryner, Hans Sacklén, Markus Sigonius, Joakim Skalin, Ann-Margret Sonnegård, Pär Stockhammar, Tomas Thorén, Annika Wallenskog, Ylva Héden Westerdahl, Hedvig Westphal, Johan Wikström and Helene Zetterberg for their interesting views and comments.

Stockholm, 6 May 2020

Harry Flam Kari Lotsberg
Chairman Deputy Chair

Lina Aldén Åsa Hansson

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Abbreviations

LFS Labor Force Surveys (Statistics Sweden)

BP Budget Bill

GDP Gross Domestic Product ECB European Central Bank

ESV Ekonomistyrningsverket (Swedish National Financial

Management Authority)

FI Finansinspektionen (Sweden's financial supervisory

authority)

IMF International Monetary Fund

NIER NIER

KPIF Consumer price index with fixed rate NA National Accounts (Statistics Sweden)

OECD Organisation for Economic Cooperation and

Development

RAMS Register-based labor market statistics (Statistics Sweden)

RB Sveriges Riksbank (Sweden's Central Bank)
RiR Riksrevisionen (Swedish National Audit Office)

SCB Statistiska centralbyrån (Statistics Sweden)

VP Spring Fiscal Policy Bill WTO World Trade Organization

Contents

| 1 | ne Fisca | I Policy Council's remit | I |
|----|----------|------------------------------------------------------|-------|
| | | framework | |
| Sι | ımmary. | | 5 |
| 1 | | onomic situation | |
| | 1.1 | The coronavirus pandemic | |
| | 1.2 | International development in 2019 | |
| | 1.3 | Developments in Sweden in 2019 | |
| | 1.4 | Effects of the coronavirus pandemic on the S | |
| | | economy | 19 |
| | 1.5 | The Swedish boom 2015-2019 | 32 |
| | 1.6 | Assessments and recommendations | 36 |
| 2 | The fise | cal policy framework | 37 |
| | 2.1 | What does the framework allow in a crisis? | 37 |
| | 2.2 | The surplus target | 40 |
| | 2.3 | The debt anchor | 56 |
| | 2.4 | The expenditure ceiling | 58 |
| | 2.5 | The budget process | 64 |
| | 2.6 | Assessments and recommendations | 68 |
| 3 | Stabilis | ation policy - opportunities and limitations | |
| | of fisca | l policy | |
| | 3.1 | Fiscal policy in BP20 | |
| | 3.2 | The coronavirus pandemic and economic policy | 73 |
| | 3.3 | Fiscal policy during the financial crisis 2008-2009. | 84 |
| | 3.4 | Short-term effects of fiscal policy | 87 |
| | 3.5 | Discussion | 91 |
| | 3.6 | Assessments and recommendations | |
| 4 | Long-to | erm sustainable public finances | |
| | 4.1 | NIER's assessment February 2020 | |
| | 4.2 | The Government's assessment in VP20 | 100 |
| | 4.3 | The role of the framework | 102 |
| | 4.4 | Discussion | 103 |
| | 4.5 | Sensitivity analysis | 105 |
| | 4.6 | The need for budget reinforcement in the scenario | os116 |
| | 4.7 | Assessments and recommendations | 116 |
| 5 | Forecas | st evaluation | 118 |
| | 5.1 | Background | 118 |

| 5.2 | Forecast evaluations by the Government, NIER | and |
|------------|------------------------------------------------|-------|
| | others | |
| 5.3 | The Council's forecast evaluation | |
| 5.4 | Forecast revisions for net lending | .127 |
| 5.5 | Forecast revisions for net lending | .130 |
| 5.6 | Assessments and recommendations | .133 |
| 6 Technol | ogical development and the Swedish | |
| labor ma | ırket | . 135 |
| 6.1 | Trends in the Swedish labor market 1985-2017 | .135 |
| 6.2 | Effects on occupational groups, relative wages | and |
| | regions | .137 |
| 6.3 | Discussion | .138 |
| 6.4 | Assessment | .139 |
| Appendix | | . 141 |
| References | | 143 |

The Fiscal Policy Council's remit

According to its instruction, the Fiscal Policy Council, ¹is required to review and evaluate the extent to which the fiscal and economic policy objectives proposed by the Government and decided by the Riksdag are being achieved, and thus to contribute to more transparency and clarity about the aims and effectiveness of economic policy.

The Council is required, with the Spring Fiscal Policy Bill and the Budget Bill as a basis, to assess whether fiscal policy is consistent with:

- 1. Long-term sustainable public finances.
- 2. The budgetary policy objectives, in particular the surplus target and the expenditure ceiling, but also the debt anchor and, where necessary, the municipal balance requirement.

The Council, with the Spring Fiscal Policy Bill and the Budget Bill as its basis, is also required to:

- 3. Assess whether the fiscal stance is consistent with cyclical developments in the economy.
- 4. Evaluate the Government's forecasts of economic development and reports to the Riksdag on the public finances and the costs of reform proposals. This evaluation must comply with Article 4(6) of European Council Directive 2011/85/EU of 8 November 2011, in its original wording.

The Council is also tasked with reviewing and assessing whether fiscal policy is in line with healthy long-term sustainable growth and leads to long-term sustainable high employment, examining 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 proposed measures, and analysing the effects of fiscal policy on the distribution of welfare in the short and long term.

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

¹ SFS 2011:446, SFS 2016:1088 and SFS 2017:1316.

The fiscal framework

The fiscal framework consists of the fundamental principles that fiscal policy is to follow to be sustainable in the long term.² Some of these principles are governed by law, while others follow practice. The budgetary objectives — i.e. the surplus target, the debt anchor, the expenditure ceiling and the municipal balance requirement — together with a tight state budget process, external follow-up and transparency, are the central elements of the fiscal framework.

Under the Budget Act, the Government is required to present a proposed target for general government net lending, a surplus target. In the event of an estimated deviation from the surplus target, the Government shall explain how a return to the target will take place. The return plan must be accompanied by a timetable and normally started in the following year, and the pace of the return to the target must take into account the economic situation.

Under the Budget Act, the Government must propose an expenditure ceiling for the third year ahead in the Budget Bill. The Riksdag approves the expenditure ceiling. Under the expenditure ceiling, there is customarily a budget margin of a specified size. This is mainly there to act as a buffer if expenditure develops in an unexpected way.

The expenditure ceiling is the overarching restriction in the budget process. In the budget process, priorities are set for different expenditure types and expenditure increases are considered in the light of a predetermined total fiscal space provided by the expenditure ceiling and the surplus target. In principle, expenditure increases in an expenditure area have to be covered by proposals for expenditure reductions in the same area.

In addition to the surplus target, a debt anchor for general government consolidated gross debt was introduced from 2019. The debt anchor is not an operational target, but a benchmark for the desired level of debt over the medium term, and the level is set at 35 percent of GDP.

Since 2000, a balanced budget requirement has been applied to the municipal sector, which stipulates that each municipality and

² This summary is based on the so-called framework letter, SKR. 2017/18:207.

region should budget for a balanced result. However, in case of exceptional reasons, a municipality can budget for temporary deficits.

The surplus target and the debt anchor must be stable over the longer term, while it must be possible to reconsider them in the case of e.g. demographic or debt development assessments. Changes should be implemented in a predictable manner and with as wide political support as possible to avoid diminishment of their credibility. The target levels should therefore be reviewed every eight years, at the end of every other term of office.

Summary

The main task of the Fiscal Policy Council is to review and evaluate the extent to which the fiscal and economic policy objectives proposed by the Government and decided by the Riksdag are being achieved. The principal conclusions in this year's report are the following:

Economic conditions and stabilisation policy

- 1. The coronavirus pandemic has led to sharp falls in economic activity worldwide and major increases in public spending. There is considerable uncertainty about economic development. New peaks of contagion may prolong the crisis and create serious economic problems.
- 2. Even before the coronavirus outbreak, the global economy had a high public debt burden. Public debt is now set to increase. In an international context, Sweden has a low debt burden, leaving a relatively large margin for manoeuvre to respond to the crisis.
- 3. Before the coronavirus crisis, the global economy was also burdened by trade conflicts. The crisis may escalate these conflicts, which would be detrimental for a small and open economy such as the Swedish one.
- 4. Starting in March, a range of temporary measures were introduced to protect businesses and households from the economic consequences of the pandemic. It is important to help viable businesses survive, to keep unemployment levels down and to protect household income as far as possible. This will reduce the risk that the crisis may develop into a prolonged and deep recession. It is difficult to determine at this time whether the measures adopted to date are sufficient.
- 5. The measures have generally been effective and, having regard to the circumstances, rapidly implemented. However, some measures have taken a relatively long time to prepare and approve or implement.
- 6. We recommend that the Government set up an inquiry to propose effective, quick and administratively simple measures with little risk of abuse that can be activated in the event of a drastic fall in activity in parts or all of the economy. The same

- inquiry should also clarify the Government's financial responsibility for the consequences of extraordinary events such as a pandemic. In addition, the rapid evolution of the crisis uncovers a need for some form of quick indicator enabling the Government and other decision-makers to obtain an understanding in real time of how the economy is changing.
- 7. There is probably a public finance scope for further emergency measures as well as a more traditional stabilisation policy once the economy is no longer hampered by coronavirus-related restrictions. However, we do not believe that active fiscal policy can fully neutralise the consequences of the pandemic. It is crucial that the measures implemented are socio-economically effective.

Employment and unemployment

- 8. The Swedish labor market has developed well in recent years. Despite a slight slowdown in 2019, the baseline just before the pandemic outbreak was relatively good. However, unemployment among foreign-born persons remained significantly higher than among those born in Sweden.
- 9. The labor market has deteriorated drastically as a result of the coronavirus pandemic. Unemployment has risen sharply, while the number of lay-offs and furloughed workers has reached record levels.
- 10. The new Short-Time Work Allowance Act appears to be relatively effective in reducing the number of redundancies. However, short-term furlough does not help individuals with fixed-period or on-call contracts, which are common in, for example, the hotel and restaurant industry and retail.
- 11. In case of a prolonged economic recovery, many unemployed persons will find it difficult to find new jobs. It is likely to be difficult for young people and new arrivals to enter the labor market, while transition problems may affect many employees. Overall, this may result in rising long-term unemployment levels.

The surplus target and the expenditure ceiling

- 12. The fiscal policy included in the 2020 Budget Bill did not deviate materially from the surplus target. However, the coronavirus crisis will lead to a major deviation from the surplus target. This is not a breach of the framework. The deviation is duly justified and fits within the flexibility provided by the framework. The framework aims both to create resilience in public finances and a financial buffer that can and should be used in deep recessions and unforeseen crises.
- 13. In the Council's view, given the speed and unpredictability of the crisis, it is still too early to have a clear idea of the impact of the coronavirus crisis on public finances. It is therefore unreasonable to expect the Government to present, at this early stage, planned measures to facilitate a return to the surplus target. However, fiscal discipline, long-term sustainability of public finances and a financial buffer will be as important after the coronavirus crisis as they were before the crisis.
- 14. As previously, the Council notes that the surplus target has not been achieved on a retrospective view. We believe it is imperative that fiscal policy should be designed so that it does not systematically lead to a net lending that is too low in relation to the surplus target.
- 15. The proposed SEK 350 billion increase in the 2020 spending ceiling is unique and sizeable, but must be seen in the light of the exceptional economic downturn and the fact that further measures may be necessary. Against this background, we believe that the increase is justified.
- 16. The Council considers that gross debt will fall beyond the tolerance range of the debt anchor.

The budget process

17. In February 2020, the Finance Committee took the initiative for the first time to amend the budget for the current year. Although not contrary to budgetary rules, it was a departure from the principle of a coherent budgetary treatment entailing, in the Council's view, a weakening of the budgetary process.

Long-term sustainable public finances

- 18. Demographic developments will put pressure on public finances in the coming decades. Even before the coronavirus pandemic, the calculations of the National Institute of Economic Research showed that public finances were not sustainable in the long term, even though a modest reinforcement would make them sustainable. However, the Council's sensitivity calculations indicate that sustainability deteriorates significantly with reasonable assumptions of slightly higher unemployment levels or higher relative wages in the welfare sector.
- 19. In its sustainability calculations, the Government assumes that there will be no rise in standards in the public sector. This is an unrealistic assumption and may paint an overly bright picture of the long-term sustainability of public finances.

Forecast evaluation

- 20. Generally, the Government makes no more forecasting errors in relation to GDP growth and unemployment than other analysts. However, the forecasting errors in relation to public savings are relatively major. The Council believes that the Government should include its own public savings forecasts in its forecast evaluation.
- 21. The Government's calculation of gross debt development over two and three years is misleading because it is based on projections with unchanged rules.
- 22. In the Government's net lending forecasts, the impact of economic activity has been underestimated. This means that there is a tendency to underestimate savings in economic upturns and to overestimate them in economic downturns.

Technological development and the Swedish labor market

23. Technological developments with increasing robotization and use of so-called artificial intelligence will lead to changes in the labor market. The Council considers that there are currently no strong reasons to believe that automation would generally affect wages or employment. However, technical change may – as in

the past – affect wage differences between jobs and sectors and regional differences.

1 The economic situation

The purpose of this chapter is, as a basis for the Council's assessments, to draw a picture of the economic situation and the conditions for growth in Sweden and the world at large. Since we are instructed to evaluate the Budget Bill for 2020 (BP20), the 2020 Spring Economic Bill (VP20) and the additional budgets recently presented by the Government, we present both the economic picture in autumn 2019 (Sections 1.2 and 1.3) and the sharply deteriorating and very uncertain situation in spring 2020 (Section 1.4). It is in the light of these economic developments that the Council in future chapters discusses and evaluates the economic policies proposed by the Government and adopted by the Riksdag. The Council produces no economic forecasts of its own; rather, our analysis is based on forecasts published by other analysts and forecasters.

1.1 The coronavirus pandemic

The coronavirus pandemic has led to sharp falls in economic activity worldwide. At present, there is no effective vaccine or effective drug to treat COVID 19.³ It is therefore inevitable that the pandemic will have a negative impact on economic activity for the foreseeable future, although it is too early to say how big and how lasting the consequences will be.⁴ The pandemic affects the economy in several ways: the production of goods and services has stalled at the same time as consumption has fallen drastically, partly as a result of the measures taken by governments in large parts of the world to limit the spread of infection, but also because of changes in the behaviour of people and businesses. If further waves of contagion were to hit the world, the economic downturn may deepen further.⁵ A protracted crisis could have a negative impact on countries' production capacity, such as if supply and value chains are destroyed

³ COVID 19 stands for *coronavirus disease 2019*. On 11 March 2020, the World Health Organisation (WHO) declared COVID 19 a pandemic.

⁴ In the last hundred years, the world has been hit by four influenza pandemics (1918, 1957, 1968, 2009). These pandemics affected economic activity for a limited period of time; for an analysis see e.g. Jonung and Roeger (2006), Verikios, et al. (2011) or Barro et al. (2020). No one knows whether the corona pandemic has different epidemiological characteristics than previous pandemics, or whether the world economy has changed in such a way that a pandemic today has other economic consequences. Historical experience therefore does not provide any guidance in assessing how the current economic crisis may develop.

⁵ See IMF (2020) for a discussion.

by bankruptcies, or lead to a fall in employment as a result of people losing their footing in the labor market.

The health crisis and the economic crisis are putting a great deal of strain on societies all over the world. It is likely that the economic problems of the pandemic will persist even long after the coronavirus-related restrictions have been dismantled. The world economy was already burdened by a number of problems – such as high public debt and trade conflicts – that are now in danger of worsening. Most of the evidence, therefore, suggests that governments and parliaments around the world will have to work for a long time on the management of both the health effects of the pandemic and the economic problems it has caused. Our account of the economic situation and analysis of the Government's actions are, of course, characterised by the currently prevailing uncertainty.

1.2 International development in 2019

The Swedish economy is largely determined by developments in the world economy. The development of economic activity in the world generally was weaker in 2019 than in the previous years. The growth rate of global GDP was 3 percent in 2019, down from 3.6 percent in 2018.⁶ This is the lowest growth rate in a single year since the financial crisis (Figure 1.1).

The weaker growth rate in 2019 was due, among other things, to lower investment rates, a decline in global trade and a lower growth rate in the industrial sector. Economic and political uncertainty has been high in recent years. In its autumn 2019 forecast, the European Commission highlighted the risks often mentioned in these contexts: uncertainty regarding the future relationship between the EU and the UK⁷, US tariffs on European goods and the trade dispute between China and the US.⁸

⁶ IMF (2020).

⁷ Even though the relationship between the UK and the EU is determined until 31 December 2020, it remains unclear what it will look like in the longer term. There is still a risk that the parties may not agree on a trade agreement before the end of the transition period, which could result in a rapid change in the relationship by the end of the year.

⁸ The trade dispute between the United States and China began in 2018 and reduced, through higher tariffs, trade between the countries while it increased uncertainty for companies. In early 2020, however, the countries took steps towards mitigating the trade conflict. In January, an agreement was concluded, described as the first step towards a comprehensive trade agreement.

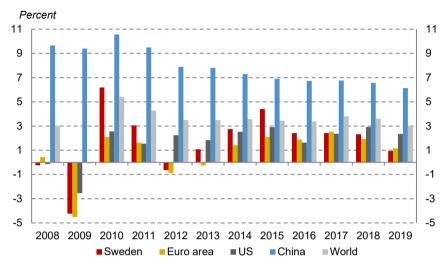


Figure 1.1 Growth in the global economy 2008-2019

Note: Growth rate of GDP at constant prices. Source: IMF (2020).

The slowdown in the global economy was also apparent in the euro area. Figure 1.1 shows that GDP growth in the euro area fell back to 1.2 percent in 2019, down from 1.9 percent in 2018. Total industrial output in the euro area has declined in recent years, in the summer of 2019 it was about four percent lower than two years earlier. Industrial output stabilised after the summer and then continued to fall at the end of the year.

In the euro area, household consumption grew by 2 percent in 2019. Overall, European growth in 2019 was driven by domestic factors, while global developments had a negative impact on growth. Unemployment in the euro area fell to 7.5 percent in 2019, comparable to the pre-financial crisis period. Despite the low interest rates favourable for growth and a somewhat expansive fiscal policy, expectations at the end of 2019 were that the growth rate in the euro area would continue to decline over the next few years.

Activity in the US economy slowed down in the second half of 2019, after a relatively long period of good growth (Figure 1.1). Unemployment stood at 3.5 percent in September 2019 – the lowest level in 50 years. The lower growth rate was due to lower investment growth, both in business and in housing, reduced exports and weak

⁹ NIER (2019a).

growth in the labor force.¹⁰ The slowdown in investment and exports was caused by uncertainty in the world economy, while global demand fell. The year 2019 saw the biggest decline in world trade in goods recorded since the crisis year 2009.¹¹ The US economy was expected to move towards neutral resource utilisation in early 2020. While consumer confidence in a favourable economy in the future was high, business confidence in the future had declined for several years.

The rebalancing of the Chinese economy to rest more on domestic consumption has been accelerated by the trade dispute with the United States and the weak global industrial economy. ¹² Subdued manufacturing growth slowed GDP growth in China in the last quarters of 2019. At the end of 2019, growth in GDP was expected to be between 6 percent and 6.5 percent in 2019 and 2020.

1.3 Developments in Sweden in 2019

In 2019, the Swedish economy entered a clear slowdown phase, which may be regarded as a normal development after several years of high resource utilisation. The slowdown was reinforced by the uncertainty surrounding Brexit and international trade conflicts. At the end of 2019, resource utilisation in the Swedish economy was expected to be slightly lower than normal (Figure 1.2) and unemployment to rise slightly in 2020 and 2021. In line with global developments, activity and confidence in the Swedish economy slowed down in autumn 2019 (Figure 1.3).

Swedish exports consist largely of investment goods and were therefore affected by the declining willingness to invest in the world. Domestic investments have been strong in recent years as Swedish companies have expanded their production capacity. With a declining global economy and well-constructed capacity, the need for domestic investments decreased in 2019.

¹⁰ IMF (2019b).

¹¹Sveriges Riksbank (2020a).

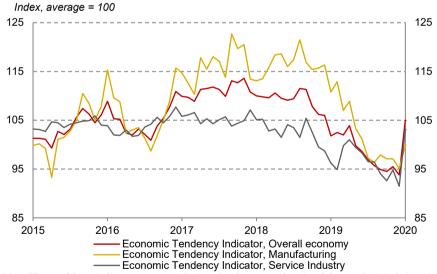
¹² NIER (2019b).

Percentage of potential GDP 2 2 1 1 0 -1 -1 -2 -2 -3 -3 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 NIER December 2019 −BP20 − -RB October 2019

Figure 1.2 Sweden's GDP gap, pre-corona crisis assessment

Note: The GDP gap shows how actual GDP relates to its long-term trend. A positive gap indicates that the economy is in a boom, while a negative gap indicates a recession. Source: NIER (2019b), Sveriges Riksbank (2019a) and BP20.

Figure 1.3 Barometer indicator and confidence indicators for the manufacturing industry and the services sector



Note: The confidence indicators are normalised so that the average is 100 and the standard deviation 10 since 1996.

Source: NIER (2020a).

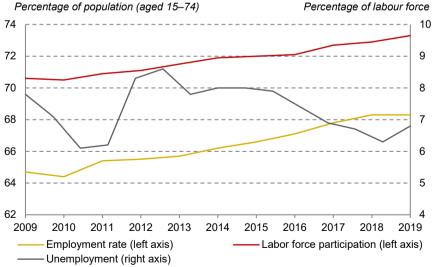
Percentage points and percentage 3 2 2 1 1 0 0 -1 2017 2018 2019 ■ Household Consumption Public Consumption Investment Warehousing Net exports GDP-growth (right axis)

Figure 1.4 Contribution to GDP growth in 2017-2019

Note: The bars show a change as a percentage of GDP in the previous year, expressed in constant prices.

Source: NIER (2020).

Figure 1.5 Labor market development before the corona crisis



Source: Statistics Sweden, Labor Force Surveys (LFS).

The decline in manufacturing had a dampening effect on service sector output as a significant part of service output is used as inputs in the manufacturing industry. The reason why, despite the weak global industrial activity, net exports contributed to GDP growth (Figure 1.4) is partly because service exports developed strongly in 2019. The development was mainly based on research and development and ICT services. GDP growth was also helped by an increase in household consumption in the second half of 2019, having been weak at the beginning of the year.

Labor market statistics also showed a slowdown in the economy in 2019 (Figure 1.5). Employment grew at a slower pace than in previous years and both employment plans and the reported labor shortage decreased significantly in autumn 2019. Unemployment rose slightly in the second half of 2019 and amounted to 6.8 percent for the full year 2019 – compared with 6.3 percent in 2018.

Despite a slight slowdown in the labor market last year, the starting point just before the coronavirus outbreak was good. The employment rate was high both from an international and historical perspective, reaching 68.3 percent. However, as the Council noted in several previous reports, there are major differences between different groups. Unemployment among foreign-born persons remained high, at 15 percent in 2019 compared with 4.4 percent among those born in Sweden.

Education is crucial for the probability of getting a job, and those with the lowest qualifications have great difficulty in gaining a proper foothold in the labor market. Among those with the highest preupper secondary education, the employment rate is just under 36 percent, while 79 percent of those with post-upper secondary education were employed in 2019 (Table 1.1).

The boom has contributed to an increase in the proportion of people in employment among those who have lived in Sweden for a shorter period, both refugee and dependent immigrants (Table 1.2). Among refugees and those in need of protection with a length of stay of 0-3 years, the proportion of people in employment doubled between 2013 and 2017. Among those who have lived in Sweden 4-9

¹³ Statistics Sweden (2019).

¹⁴ NIER (2019b).

¹⁵ Statistics Sweden, Labour Force Surveys (LFS).

¹⁶ Percentage of population aged 15–74.

¹⁷ Swedish Fiscal Policy 2017, 2018, 2019.

years, the share of people in employment increased by just over 10 percentage points to 53.7 percent over the same period.

Table 1.1 Labor market status by level of education 2019, percent

| | Employment rate | Labor force participation | Unemployment |
|------------------------------------|-----------------|---------------------------|--------------|
| Pre-upper secondary education only | 35.7 | 46.1 | 22.6 |
| Upper secondary education | 71.0 | 75.2 | 5.6 |
| Post-upper secondary education | 79.1 | 82.6 | 4.2 |

Note: aged 15-74.

Source: Statistics Sweden, Labor Force Surveys (LFS).

Relatives of refugees and those in need of protection continue to participate less in the labor market. This applies in particular to those with short periods of stay. However, in this group the proportion of people in employment has also risen in recent years.

Table 1.2 Working persons by origin and length of stay, percent of

| | P - P | • | | | | |
|-----------|----------------------------------------|-------|-------|-------|---------------|-------|
| | Refugees/Persons in need of protection | | | Rela | atives, refuç | gees |
| Length of | 0-3 | 4-9 | 10- | 0-3 | 4-9 | 10- |
| stay | years | years | years | years | years | years |
| 2013 | 12.9 | 42.9 | 64.4 | 7.7 | 25.0 | 60.1 |
| 2014 | 13.4 | 44.5 | 65.4 | 5.8 | 28.0 | 61.4 |
| 2015 | 15.7 | 46.9 | 66.9 | 6.2 | 34.2 | 63.9 |
| 2016 | 17.9 | 50.9 | 68.1 | 8.8 | 40.1 | 66.5 |
| 2017 | 24.4 | 53.7 | 68.3 | 10.9 | 41.4 | 66.8 |

Source: Statistics Sweden, Register-based labor market statistics (RAMS).

The Government's view of GDP growth for 2019 and 2020 when the Budget Bill was presented differed somewhat from both the Riksbank's (RB) and the National Institute of Economic Research's (NIER) assessments (Table 1.3). The forecasts in the Budget Bill were more optimistic, both for the current and next years. The Riksbank's and NIER's forecasts reflect developments in autumn 2019 when there were several indications that economic activity weakened.

Table 1.3 Macroeconomic key figures, autumn 2019

| Forecast | , | | |
|-------------------------------------|------|------|------|
| BP20 (18 September 2019) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.5 | 1.2 | 1.7 |
| GDP gap ² | 0.9 | 0.2 | 0.0 |
| Employment | 0.8 | 0.4 | 0.6 |
| Unemployment ³ | 6.3 | 6.4 | 6.4 |
| KPIF | 1.7 | 1.6 | 1.8 |
| Fiscal net lending ⁴ | 0.4 | 0.3 | 0.4 |
| Structural net lending ² | 0.0 | 0.2 | 0.5 |
| Gross debt ⁴ | 34.8 | 33.4 | 31.8 |
| NIER (9 October 2019) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.2 | 1.1 | 1.7 |
| GDP gap ² | 0.9 | 0.0 | -0.1 |
| Employment | 0.2 | -0.1 | 0.6 |
| Unemployment ³ | 6.7 | 7.1 | 7.2 |
| KPIF | 1.7 | 1.5 | 1.6 |
| Fiscal net lending ⁴ | 0.4 | -0.1 | 0.0 |
| Structural net lending ² | 0.2 | 0.0 | 0.1 |
| Gross debt ⁴ | 35.3 | 35.1 | 34.5 |
| The Riksbank (24 October 2019) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.3 | 1.0 | 1.5 |
| GDP gap ² | 0.9 | 0.2 | 0.0 |
| Employment | 0.3 | 0.3 | 0.4 |
| Unemployment ³ | 6.8 | 6.9 | 7.0 |
| KPIF | 1.7 | 1.8 | 1.8 |
| Fiscal net lending ⁴ | 0.3 | -0.1 | 0.0 |

Note: ¹Calendar adjusted values in fixed prices. ²Percentage of potential GDP. ³Percentage of labor force, aged 15-74. ⁴Percentage of GDP. The Riksbank does not report structural net lending or gross debt in its forecasts.

Source: BP20, NIER (2019a) and Sveriges Riksbank (2019a).

1.4 Effects of the coronavirus pandemic on the Swedish economy

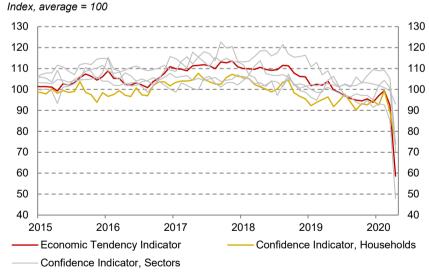
The coronavirus pandemic is hitting the Swedish economy hard. As at spring 2020, it is hard to have a well-founded idea about of how hard the impact will be. Concerns about infection and Government rules and recommendations to limit social contacts have a severe dampening effect on household demand, while supply problems are disrupting production in parts of the economy. In addition, demand is negatively affected by very extensive measures to limit the spread of infection in other countries.

Percentage change 8 8 6 6 4 2 2 -0 1 0 0 -2 -2 -4 -4 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 ■ NIER, 1 April 2020 ■VP20 ■ IMF, April 2020

Figure 1.6 Growth in the global economy 2008-2021

Note: Growth rate of GDP at constant prices. Source: IMF (2020), NIER (2020a), VP20.

Figure 1.7 The Economic Tendency Indicator



Note: The graph includes confidence indicators for manufacturing, construction, retail trade and the service sector. The Figure extends to April 2020.

Source: NIER (2020a).

The economic activity in the world has fallen surprisingly fast. As recently as January this year, the International Monetary Fund (IMF) expected the world economy to grow by 3.6 percent in 2020. In its April forecast, the IMF cut growth for the current year to -3 percent (Figure 1.6), i.e. a downward revision of 6.6 percentage points. The financial crisis year 2008 can serve as a reference point: the world economy contracted by 0.1 percent. Growth in the group of countries described by the IMF as 'advanced' – including countries such as Australia, Canada, the Netherlands, Japan and South Korea – is estimated at -6.1 percent this year. In the euro area, the fall is estimated to be 7.5 percent and in the US closer to 6 percent. At the same time, the IMF estimates that world trade will fall by 11 percent this year. ¹⁸

As activity in the world economy falls and efforts are made to save businesses and jobs, public debt is growing. We do not yet know how large indebtedness will be, but at present the IMF expects the group of 'advanced countries' to show an average budget deficit this year of 11 percent of GDP.¹⁹ This would mean that by the end of 2020, the total debt of the rich world would amount to around 122 percent of GDP.²⁰ Debt levels of this magnitude risk putting countries in a very difficult situation (see further Box 1.1).

The rapid course of the crisis has surprised all analysts. NIER's barometer indicator fell by 34 units from 92.5 in March to 58.6 in April (Figure 1.7). The indicator, which summarises both companies' and households' views on the economy, is now eight units lower than the lowest level during the financial crisis. The fall in April is greater than anything previously observed. All business sectors and households have contributed to the fall. The most severe fall occurred in the services sector. In this sector, the indicator fell by 37.6 units and was at a record low of 47.8 in April.

Another indication of the rapid course of the crisis is the number of reported bankruptcies. Figure 1.8 shows the number of

¹⁸ IMF (2020).

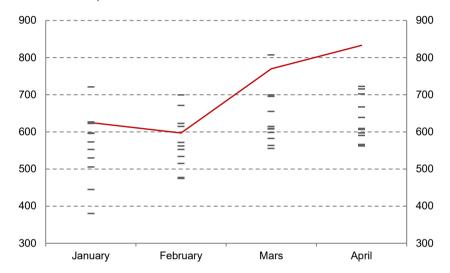
¹⁹ On 6 May, the European Commission (2020) published its spring forecast. The forecast is based on information available until 23 April. Like other analysts, the European Commission believes that European economies will shrink significantly this year, but that a recovery will begin at the end of the year. However, the European Commission stresses that there are risks of poorer developments. The European Commission expects public debt among euro area countries to rise from 86 per cent of GDP in 2019 to 102 per cent in 2020. Public debt among EU countries is projected to rise from 80 per cent in 2019 to 95 per cent of GDP in 2020.

²⁰ The Economist (2020).

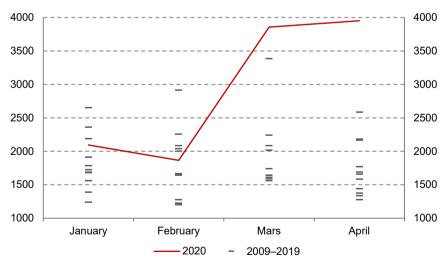
bankruptcies and how many employees were affected by the bankruptcies during the spring. The graph shows that the progress differs clearly from developments in the period 2009-2019.

Figure 1.8 Bankruptcies in early 2020

Number of bankruptcies



Number of employees directly affected by bankruptcies



Note: The grey markings (one for each year) in the graphs indicate the number of bankruptcies/employees affected by bankruptcies in each month for the years 2009-2019. The Swedish Growth Agency revised previous incorrect figures in May.

Source: Statistics Sweden and Growth Analysis, Bankruptcies and public compositions.

Box 1.1 Where is the limit for sustainable debt?

In this box, we present a theoretical discussion of where the limit for sustainable public debt should be. We start from an equation describing the change in public debt:

$$s_t - s_{t-1} = \left(\frac{r_t - g_t}{1 + g_t}\right) \times s_{t-1} - p_t$$
 (1)

where s_t public debt as a percentage of GDP at date t, r_t is the real interest rate at date t, g_t is the rate of growth in real GDP at date t, and p_t is primary net lending, i.e. tax revenues minus public spending on consumption and investments, but excluding net interest income and expenses as a proportion of GDP at date t.

We now define p^{max} as the maximum primary net lending that it is possible to achieve in the economy, i.e. the difference between the maximum taxes that can be taken from the economy without tax revenues starting to fall (the top of the Laffer curve) and the minimum government expenditure that is politically, socially and structurally sustainable to maintain without the economy ceasing to function. Both of these levels are unclear from a theoretical standpoint, and it is difficult or impossible to identify empirically where they lie.

For the sake of argument, we will assume that there is a level of debt that represents a breaking point, i.e. if debt rises above this level, it will continue to grow uncontrollably. We will call this debt level s^{max} . If the debt should exceed s^{max} , the Government will no longer be able to obtain any new loans to roll over debt repayments going forward and will be forced to 'suspend payments' – in other words, the country will be insolvent.²¹ A mathematical expression for this breaking point s^{max} can then be formulated with the aid of equation (1) and the greatest possible primary net lending p^{max} as²²

$$s^{max} - s^{max} = \left(\frac{r_t - g_t}{1 + g_t}\right) \times s^{max} - p^{max} \implies$$

$$s^{max} = \left(\frac{r_t - g_t}{1 + g_t}\right)^{-1} \times p^{max} \tag{2}$$

²¹ The example of Greece during the euro crisis shows that it is far from clear just how sharp this boundary is. If an economy were to cross this boundary s^{max} the situation turns into a negotiation between lenders and borrowers. In this negotiation, it is in the interest of the lenders to recover as much as possible of what they have loaned while it is in the interest of the borrower to maintain contact with the financial market. It is therefore unclear whether there really is any distinct breaking point. It probably varies from case to case; see Krugman (1988) for a discussion.

²² In equation (1) we replace s_t and s_{t-1} with s^{max} , and p_t is replaced with p^{max} .

Example: If
$$p^{max} = 7.5 \%$$
 of GDP and $\left(\frac{r_t - g_t}{1 + g_t}\right) = 5 \%$, then $s^{max} = 1.5 \times \text{GDP}$.

Equation (2) shows how crucial the relationship between real interest rates and real growth is to the question of sustainable debt. If the difference between real interest rates and real growth widens, the maximum possible level of debt s^{max} will fall and vice versa.

The reasoning above is grossly simplified. Long before public debt has started to approach the boundary s^{max} various types of problems are likely to arise. The higher the level of debt, the greater proportion of the tax revenues must be used for interest payments instead of public consumption and investment. Even in the short term, this can worsen the growth prospects in the country and therefor aggravate the debt problem.

A higher level of debt limits the Government's scope to pursue a stabilisation policy. Loan-financed stimuli will increase the debt and may cause the debt to grow as a percentage of GDP also. Fiscal policy stimuli in an economy with high levels of debt will have a limited or even negative effect on demand in the economy. Another problem is that the market interest rates paid by the state tend to rise as debt grows; a highly indebted state must pay a higher risk premium than a country with little debt. Interest costs that have been unproblematic can increase very rapidly and entail a growing need for consolidation. There seems to be an inverse statistical correlation between debt and growth, and it is possible that this is intensified when the debt passes a certain threshold. But the question of what sort of causal relationship exists between debt and growth, and whether there are any threshold effects, is still debated.

²³ Empirically oriented research does not provide clear answers as to how large the debt can be before problems arise. There is some empirical support for the assertion that an economy may have problems if the debt is in the range of 80-100 per cent of GDP and above, see Reinhart and Roggoff (2010).

²⁴ Corsetti and Müller (2015).

²⁵ In 1993, the Swedish budget deficit amounted to about 12 per cent of GDP. Government debt had grown in three years from just over 40 per cent to around 75 per cent of GDP. One krona in every three spent under the state budget was borrowed, and roughly one third of expenditure consisted of interest payments on government debt. In the early 1990s, real interest rates rose sharply: in some cases by ten percentage points, see Söderström (1995).

²⁶ The existence of a statistical correlation between high government debt and low GDP growth does not necessarily mean that a high level of dent *causes* slow growth. It may also be that low growth leads to a high level of debt; see Reinhart and Rogoff (2010), Herndon et al. (2014), Panizza and Presbitero (2014) and Pescatori et al. (2014).

As there was a need to quickly get an idea of the effects of the pandemic on the Swedish economy, Statistics Sweden began publishing preliminary statistics for the first quarter of 2020 in April. The publication took place outside ordinary production and is categorized as "experimental statistics". ²⁷ In addition, the rapid evolution of the crisis uncovers a need for some form of indicator enabling the Government and other decision-makers to gauge economic activity in real time.

Table 1.4 Macroeconomic key figures, autumn 2020

| Forecast | | | |
|--------------------------------------|------|--------------|-------------|
| VP20 (9 April 2020) | | | _ |
| Main scenario (Pessimistic scenario) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.3 | -4.2 (-10.0) | 3.3 (4.0) |
| GDP gap ² | 0.8 | -5.2 (-11.0) | -3.6 (-9.0) |
| Employment | 0.7 | -1.6 | 0.6 |
| Unemployment ³ | 6.8 | 9.0 (-13.5) | 9.0 (13.0) |
| KPIF | 1.7 | 0.5 (-1.3) | 1.5 (-0.5) |
| Fiscal net lending ⁴ | 0.4 | -3.8 (-9.0) | -1.4 (-7.0) |
| Structural net lending ² | 0.4 | -0.9 | 0.6 |
| Gross debt ⁴ | 35.1 | 39.9 (49.0) | 38.3 (53.0) |
| NIER (1 April 2020) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.3 | -3.4 | 3.4 |
| GDP gap ² | 0.5 | -4.6 | -3.0 |
| Employment | 0.7 | -1.6 | 0.2 |
| Unemployment ³ | 6.8 | 8.7 | 8.9 |
| KPIF | 1.7 | 0.5 | 1.4 |
| Fiscal net lending⁴ | 0.4 | -3.5 | -1.9 |
| Structural net lending ² | 0.3 | -1.3 | -0.2 |
| Gross debt ⁴ | 35.9 | 40.9 | 39.7 |
| Riksbank (28 April 2020) | | | |
| Scenario A (Scenario B) | 2019 | 2020 | 2021 |
| GDP ¹ | 1.3 | -6.9 (-9.7) | 4.6 (-1.7) |
| Employment | 0.7 | -2.2 (-3.8) | 0.1 (-0.7) |
| Unemployment ³ | 6.8 | 8.8 (-10.1) | 9.0 (-10.4) |
| KPIF | 1.7 | 0.6 (-0.6) | 1.5 (-1.3) |
| Fiscal net lending ⁴ | 0.5 | -6.9 (-9.3) | -3.2 (-7.9) |

Note: ¹ Calendar adjusted values in fixed prices. ² Percentage of potential GDP. ³ Percentage of labor force, aged 15-74. ⁴ Percentage of GDP. The Government presented three scenarios for economic development in VP20, two of them presented in the table. The Riksbank does not report structural net lending or gross debt in its forecasts.

Source: VP20 (Table 4.7, p. 33), NIER (2020a) and Sveriges Riksbank (2020b).

During the spring, it has been very difficult to forecast the development of the economy. The Government, the Riksbank and NIER have chosen instead to present different scenarios for economic development. However, developments can be both better

²⁷ Statistics Sweden (2020b).

and worse than assumed in these scenarios. The IMF, the Government, the Riksbank and NIER all assume that the economic downturn will slow down in the second half of 2020 and that a recovery will begin at the end of 2020.

In VP20, the Government presents a main scenario and two alternative scenarios – one more optimistic and more pessimistic – for economic development. Table 1.4 below describes the Government's main scenario and the pessimistic alternative scenario. In its main scenario, the Government expects the economy to shrink by just over 4 percent in 2020, before slowly recovering as activity in the world economy gradually normalises. In the pessimistic scenario, the virus outbreak is assumed to have a greater negative impact on the economy in 2020 compared to the forecast in the main scenario, while the post-2020 economic recovery is assumed to be slower.

In the pessimistic scenario, the direct and indirect negative effects of the virus outbreak contribute to a greater fall in production and GDP growth in Sweden in 2020 than assumed in the main scenario. As a result, resource utilisation in Sweden is significantly lower than in the main scenario, with the result that unemployment is higher and inflationary pressures in the economy lower compared to the main scenario.

As a consequence of the lower level of activity of the economy, government net lending is lower than in the main scenario, mainly as a result of lower income from taxes, but also to some extent due to an increase in public expenditure as unemployment rises and an increased scope of active measures. As an effect of the deterioration of public finances, together with a lower GDP, the public sector consolidated gross debt as a percentage of GDP increases.

On 29 April, NIER presented an update of the economic outlook, stating that developments in the global and the Swedish economy in the near future are very uncertain. The update includes a baseline and an alternative scenario (table 1.5). NIER believes that the downward risks in the baseline scenario dominate. An even more serious infectious spread would lead to further financial pressures. Global GDP growth may be even lower than in the baseline scenario if stronger measures being introduced to mitigate the spread of infection or if current measures become the longer-lasting. Production disruptions in various countries may become more significant, with more companies going bankrupt. There is also a risk

that the measures in the form of financial support packages for households and companies introduced by different governments will not be sufficient. Each, or a combination of these factors, could lead to lower GDP growth in the world this year and next year compared to the baseline scenario.

Table 1.5 NIER's forecast update

| Forecast | | | | | |
|---------------------------------|------|------|------|--|--|
| NIER (29 April 2020) | 2019 | 2020 | 2021 | | |
| GDP ¹ | 1.2 | -7.0 | 4.8 | | |
| Employment | 0.7 | -3.7 | -0.3 | | |
| Unemployment ² | 6.8 | 10.2 | 11.0 | | |
| KPIF | 1.7 | 0.5 | 1.5 | | |
| Fiscal net lending ³ | 0.4 | -6.3 | -3.2 | | |
| Gross debt ³ | 35.1 | 44.7 | 44.2 | | |

Note: ¹Market Price. ² Percentage of labor force, aged 15-74. ³ Percentage of GDP. NIER does not specify the entire alternative scenario in its forecast update, but states that external GDP growth in this scenario is assumed to be almost 3 percentage points lower than in the baseline scenario in 2020. The decline is assumed to be temporary, but external GDP growth will also be lower in 2021. Swedish GDP will fall by almost 10 percent in 2020. Unemployment is rising and is projected to be 3 percentage points higher than in the baseline scenario in 2021. In the alternative scenario, Maastricht debt will grow to well over 50 percent of GDP by 2021.

Source: NIER (2020b).

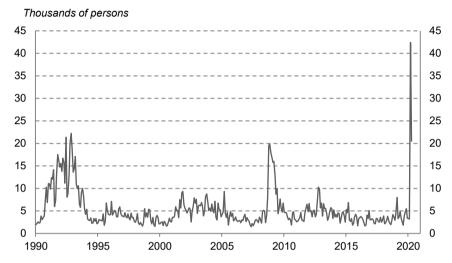
The Council considers that the longer they are maintained, the stronger the negative economic effects of the coronavirus-related restrictions. The risk of the coronavirus crisis developing into a protracted international recession is imminent. Experience from past deep recessions suggests that the negative effects on employment and production levels may persist for several years after the crisis has been overcome.

1.4.1 Spring 2020: A rapidly declining labor market

Even before the coronavirus outbreak, economic activity was in a slowdown phase and unemployment also rose slightly in the first two months of the year. In March, the slowdown was sharp, partly as a result of the measures taken by the Government to reduce the spread of infection. In March 2020, the number of lay-offs was historically high, as just over 42,000 people were given notice of termination (Figure 1.9). Hardest hit are the hospitality industry, the transport industry (especially aviation) and retail. Compared to both the crisis of the 1990s and the financial crisis of 2008, the level of lay-offs has been about twice as high. In April, there were also high levels of lay-offs, almost 27,000 persons. At the same time, it is important to

stress that not everyone who is made redundant will become unemployed.

Figure 1.9 Number of persons affected by lay-off



Source: Swedish Public Employment Service, lay-off statistics.

In a situation where the recession is deepening, or as currently – where there is an acute crisis in the economy – individuals who are not firmly established in the labor market are at very high risk of losing their jobs. They have insecure jobs to a greater extent, such as fixed-term, on-call and hourly employments. At the same time, demand has now fallen on a broad front, which means that workers in large parts of the business world and at many different levels are affected in the shorter term.

The Government has taken several measures to prevent increased unemployment. The new Short-Time Work Allowance Act is retroactively effective from 16 March 2020. The law allows companies to apply for short-term lay-offs of staff and reduce working hours by a maximum of 60 percent for the rest of the year. In mid-April, the Government announced that employers would have the option to apply during May, June and July for a short-term work allowance for up to 80 percent of working time.

At the beginning of April, NIER estimated that, on average, short-term work will entail halved working time for 100,000

employees for the remainder of 2020.²⁸ At the beginning of May, almost 57,000 applications had been submitted to the Swedish Growth Agency. Of these, more than 42,000 applications involving 363,000 employees were granted at a cost of SEK 18.7 billion.²⁹ The Government estimated in VP20 that the cost of support for short-term work would amount to SEK 19.5 billion, but later in April wrote up the estimated cost by an additional SEK 30 billion.

In connection with the publication of its regular April forecast, NIER wrote in its assessment addressed to the Government that the criteria in the Short-Term Work Allowance Act have been met and that there are thus grounds for the Government to issue regulations for short-term work allowance. Thanks to the short-term work allowance, companies can reduce their staff's working hours next year as well, but at a lower subsidy rate of one third.

Short-term work is mainly expected to help those with permanent employment keep their employment, e.g. among airlines and in the manufacturing industry. People in insecure employment are significantly more likely to lose their jobs. In 2019, 766,000 people had a fixed-term employment position, which represents 16.6 percent of all employees. About a third of these are aged between 15 and 24 and just under a third are foreign-born. One quarter of all foreign-born persons have a fixed-term employment. The highest proportion of fixed-term contracts, 42 percent, is in the hotel and restaurant industry, which has been hit very hard. The rate of trade union membership in the industry is also low. This means that short-term work is likely to be used to a lesser extent in these industries and that many are therefore at risk of losing their jobs.

Other measures aim to further reduce costs, or increase the liquidity, of companies (see also Chapter 3). Ultimately, these measures also affect employment, but above all in the longer term, by allowing companies that were viable before the pandemic to survive until demand returns and the economy normalises.

Despite the efforts launched so far, it is clear that many have already lost or will lose their jobs in the wake of the coronavirus

31 SCB (2020a).

²⁸ NIER (2020a).

²⁹ Data according to the Swedish Growth Agency as of 5 May 2020.

³⁰ By the end of March, Scania had laid off almost its entire workforce of 19,000 employees, Volvo Cars laid off 20,000 employees, and Volvo AB laid off the same number. In the travel industry, Svedavia has laid off 26,000 employees and SAS has laid off 10,000. See SCB (2020a).

pandemic. For this group, a number of measures have been taken to mitigate the economic impact and improve career change opportunities. The ceiling amount in the unemployment insurance fund was temporarily increased from SEK 910 to SEK 1,200 per day and the basic amount from SEK 365 to SEK 510 per day. The Government also introduced temporary measures that make it easier to get unemployment benefits by lowering the membership and work requirement in the unemployment insurance fund. The number of training places within Komvux and Higher Vocational Education has also been increased.

The current forecasts indicate that the economic downturn will be severe, but relatively short-lived. If this is the case, the labor market may also recover relatively quickly. However, the uncertainty in the forecasts is significant. As a result of the sharp slowdown in the economy, employment is expected to fall and unemployment to rise this year. The rise in unemployment is, however, mitigated by the Government's measures. At the beginning of April, NIER estimated that unemployment would rise to just under 9 percent by 2020 and that Government measures would keep this figure down by three percentage points. In VP20, the Government presented a similar picture in its baseline scenario.

Forecasts presented later in the spring have tended to become more pessimistic as new information has been added. In VP20, the Government also presents an alternative scenario with much more worrying developments where unemployment is projected to be just over 13 percent in 2020-2021. If the recovery is prolonged, many of those who have become unemployed may find it difficult to find new jobs, while those who are on short-term lay-off risk being made redundant when companies are forced to adapt to a weaker demand situation. It is likely to become more difficult for young people and new arrivals to enter the labor market, while transition problems may affect many employees. Such developments may increase long-term unemployment and further burden public finances for a long time (see Chapter 4).

1.4.2 Inflation and monetary policy

Swedish inflation, like the external inflation rate, has long been low, which has motivated the Riksbank to pursue low interest rate policies

(Figure 1.10). This has resulted not only in a negative key interest rate, but also purchase of Government bonds. In 2019, however, the Riksbank raised the interest rates on two occasions. The first increase was decided in December 2018 and introduced in January 2019, and in December 2019 the key interest rate was raised again, from -0.25 percent to 0 percent. As a result, Sweden ended a period of almost five years with negative repo rates.

Annual percentage change and percentage 3,0 3,0 2.5 2.5 2.0 2,0 1.5 1.5 1,0 1,0 0,5 0.5 0.0 0.0 -0.5-0.5-1,0 -1.0 2014 2015 2016 2017 2019 2020 - CPI Repo interest rate

Figure 1.10 Inflation and the repo rate

Source: Sveriges Riksbank (2020b).

From 2014, the inflation rate rose steadily until 2017-2018 (Figure 1.10). In September 2018, CPIF inflation reached its highest level (2.5 percent) since 2008, largely due to rapidly rising energy prices. Since then, CPIF inflation has turned downwards and in March 2020 inflation was 0.6 percent. Lower energy prices are the main reason for the fall in inflation.

During March and April 2020, the Riksbank has taken several measures to try to curb the turmoil in the financial markets caused by the pandemic. The measures have focused on facilitating creditsupply in the economy and countering the rise in interest rates faced by businesses and households as uncertainty in the economy increases. The Riksbank has decided to increase the purchases of securities by up to SEK 300 billion during the current year; these purchases will also include, where necessary, other types of securities than government bonds. Furthermore, the Riksbank offers loans in a total amount of SEK 500 billion at variable rates corresponding to the

repo rate to banks whose loans to non-financial corporations develop in a satisfactory manner according to an evaluation that the Riksbank will carry out. In addition, banks are offered an unlimited amount of secured loans with an interest rate equal to 0.2 percentage points above the repo rate. The Riksbank has entered into currency exchange agreements with other central banks in order to offer Swedish banks US dollar loans. The requirements for collateral for loans from the Riksbank have also been eased. In addition to these measures, the Riksbank has lowered the overnight lending rate for loans to banks from 0.75 to 0.20 percentage points above the repo rate. However, the repo rate remains unchanged at 0 percent since the December 2019 increase.

1.5 The Swedish boom 2015-2019

Even before the pandemic outbreak, the Swedish economy was in a slowdown phase. Developments in 2019 marked the end of a boom that began in 2015.³² Swedish GDP grew by 9 percent between 2015 and 2019. Figure 1.11 shows the annual percentage change in GDP, together with accumulated growth. Even though population growth has been strong, GDP per inhabitant rose by 3.5 percent over the period.

Volume index, 2007=100 Percentage change 140 130 5 120 3 110 100 -1 90 -3 80 -5 70 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Yearly change -GDP, fixed prices

Figure 1.11 Sweden's GDP development since the financial crisis

Source: Statistics Sweden.

³² NIER (2018).

101

100

2

101

100

9

10

Between 2015 and 2018, the average economic standard, measured by disposable income per consumption unit, increased by 3 percent in real terms.³³ At the same time, income differences, measured with the Gini coefficient, have remained stable during the boom.³⁴ Even after taking account of the decrease in income dispersion in 2018, the Gini coefficient is back to its lowest level since 2014.

Index, 2015=100
104
103
102
102

Figure 1.12 Change in average disposable income indices for decile groups between 2015 and 2018

■Inklusive kapitalvinst ■ Exklusive kapitalvinst

Note.: 2018 disposable income per consumption unit, indexed to base year 2015. Disposable income is the sum of all taxable and tax-exempt income, minus tax and other negative transfers. The incomes are calculated at fixed prices (2018 price levels). The sorting by size of income is done separately for incomes including and excluding capital gains, so the same individuals are not necessarily included in the various decile groups for both measures.

Source: Statistics Sweden.

5

Another measure of income distribution is the proportion of income that accrues to top earners. The share of total income accruing to those with the top 5 percent and top 1 percent highest income brackets has remained stable during the boom. Figure 1.12 shows changes in average income in different decile groups over the period 2015-2018. Disposable income excluding capital gains has increased evenly across the decile groups during the boom. The share of

³³Disposable income is the sum of all taxable and tax-exempt income, minus tax and other negative transfers. Disposable income per consumption unit means that income is divided by weights for the type of persons included in the household. Please see the description at Statistics Sweden (2016).

³⁴ The Gini coefficient takes into account how income is distributed in a country and provides an aggregate measure between 0 and 1 – where 1 means that all income accrues to a single person and 0 that everyone in the country receives exactly the same share of income. The measure does not include the spread of assets in society, but gives a picture of how income is distributed over a year.

income that consists of capital gains changes significantly between years. In 2018, capital gains decreased, especially in the upper deciles. The change in average income during the boom is therefore more favourable to those with income in the lower deciles if income from capital is included.

The Swedish labor market developed strongly during the boom. From the beginning of 2015 to October 2019, the Swedish economy added about 400,000 jobs. This contributed to the employment rate being around two percentage points higher in 2019 than in 2015. The number of people in the labor force, consisting of those who have a job together with those looking for a job, increased by almost 300,000 from 2015 to autumn 2019. The difference in the labor market between those born in Sweden and foreign-born remained during the boom. The unemployment rate for Swedish-born persons in 2019 was 4.4 percent, down from 5.4 percent in 2015. Among foreign-born people, the corresponding figure was 15.1 percent, down from 16 percent in 2015.

Thousands Million Number of completed dwellings (right axis) Total number of dwellings (left axis)

Figure 1.13 Housing stock and built dwellings 2002-2018

Source: Statistics Sweden.

The investment share of GDP in the economy was high during the boom; in 2018, it was at its highest level since the 1980s. The high level of investments came from the business sector's investments in

³⁵ Statistics Sweden, Labour Force Surveys (LFS).

research and development as well as a strong period for construction. The local government sector also invested heavily, partly because of changes in demographics – more old and young people who require more public services, but also because of considerable need of renovation of the many properties built in 1965-1975. Between 2015 and 2018, approximately 180,000 flats and single-family houses were completed (Figure 1.13). Construction was higher during the period than in the previous boom, 2003-2007.

During the boom, household indebtedness as a proportion of disposable income has increased (Figure 1.14). Between 2015 and 2019, indebtedness as a share of disposable income after tax increased by 8 percentage points. In order to get a comprehensive picture of household indebtedness, the value of households' assets also needs to be taken into account. Indebtedness as a proportion of the financial assets of households has been stable during the boom: 30 percent in 2015 and 28 percent in 2019. This is because the stock market rose sharply during the period, while the level of household savings was high.

Percent Share of adjusted disposable income Share of household financial assets

Figure 1.14 Development of household indebtedness

Source: Statistics Sweden.

The fiscal framework defines the target for net lending over a business cycle. It is therefore important to monitor savings during the boom. For the years 2015 to 2019, net lending averaged 0.74 percent of GDP per year. Structural net lending – a measure of

public sector savings that removes effects due to economic activity – averaged 0.22 percent between 2015 and 2019. The Council has pointed out in several reports that savings remained too low during the boom, which means that the surplus target is at risk of not being reached throughout the economic cycle (see Chapter 2).

1.6 Assessments and recommendations

The coronavirus pandemic has led to sharp falls in economic activity worldwide and major increases in public spending. There is considerable uncertainty about economic development. New peaks of contagion may prolong the crisis and create serious economic problems.

Even before the coronavirus outbreak, the global economy had a high public debt burden. Public debt is now set to increase. In an international context, Sweden has a low debt burden, leaving a relatively large margin for manoeuvre to respond to the crisis. The world economy has also been burdened by trade conflicts. The crisis may escalate these conflicts, which would be detrimental for a small and open economy such as the Swedish one.

In addition, the rapid evolution of the crisis uncovers a need for some form of indicator enabling the Government and other decision-makers to gauge economic activity in real time.

2 The fiscal policy framework

In this chapter, the Council presents its assessments of how Government policy meets budgetary policy objectives. In its assessments, the Council shall take into account the policy presented in the Budget Bill and the Spring Bill. Normally, the differences between the two Bills are limited. The Spring Bill includes updates, accompanying measures, economic prospects and a number of indepth elements relating, for example, to distribution policy and long-term sustainability. However, the dramatic development of the coronavirus crisis in spring 2020 has changed the conditions. During the spring, the Government has presented a series of additional amending budgets, all of which have been dealt with promptly by the Riksdag. In addition, there was a further amending budget that was added at the initiative of the Riksdag before the beginning of the coronavirus crisis.

There were thus widely different economic realities in autumn 2019 and spring 2020 respectively. Forecasts and assessments made in autumn 2019 are outdated in spring 2020, but nevertheless we report assessments of the surplus target based partly on the situation in the autumn, and partly on that in the spring (Section 2.2). The chapter also contains assessments of the debt anchor (Section 2.3) and the expenditure ceiling (Section 2.4).

At the outset we discuss the scope allowed by the fiscal framework to deal with the acute crisis (Section 2.1). Finally, there is a section (Section 2.5) on the budgetary process following the Riksdag's initiative on 13 February to amend the 2020 budget.

2.1 What does the framework allow in a crisis?

Ever since its introduction in the second half of the 1990s, the fiscal framework has played a crucial role in the beneficial development of Sweden's public finances. The budgetary policy objectives, the surplus target, the expenditure ceiling, the balance requirement for municipalities and the debt anchor are central elements, but the framework also consists of decision-making processes and practices for both the Government and the Riksdag. Parts of the framework are regulated by law and other parts consist of application and

practice. Respecting the fiscal framework is therefore not the same as following a set of rules, but also involves following practices and observing the intentions behind the framework. The Council has repeatedly stressed the importance of respecting the framework, by neither violating its rules nor undermining confidence by departing from practice and unwritten rules.

In response to the acute coronavirus crisis, governments have taken many and comprehensive measures to limit the spread of infection and mitigate the economic damage caused by the pandemic. We believe that these measures do not conflict with the fiscal framework. The Swedish fiscal framework contains no legally binding limits or formal sanctions. There is no specified rule providing whether and, if so, when it is permissible to deviate from the framework. The absence of such an exception rule could be interpreted as though the framework provides for strict rules that must be complied with in all circumstances. However, this is not the case. In fact, the framework allows for a great deal of flexibility. The fiscal policy framework is applied under parliamentary responsibility, i.e. if a majority in the Riksdag no longer has confidence in the Government, the majority can remove the Government. If the Government's policy leads to a breach of the limits of the framework or that the application does not follow established practice, then this must be assessed politically based on all relevant circumstances.

The surplus target is defined as an average over a business cycle and there are no rules on how extensive savings must be in a single year. However, the framework document includes reasoning on how deviations should be handled to achieve the target over a normal business cycle. If there is a clear discrepancy, the Government must present a plan for how savings will return to the target and there are guidelines in the framework document on how such a plan should be designed. The speed of the return strikes a balance between the need to return to the target and the need for cyclical considerations. There is nothing in the framework that prevents the Government from allowing savings to deviate sharply from the target level in a deep and extensive crisis situation, or to allow the return to be more protracted than normal.³⁶

³⁶ Sweden is also obliged to comply with EU fiscal rules, among others the medium-term objective for net lending (MTO), the deficit limit of 3 per cent of GDP and the debt limit of 60 per cent of GDP. However, non-compliance with the rules is currently allowed (see Section 2.2.2).

The expenditure ceiling is technically the strictest restriction because it is a nominal amount set by the Riksdag. If the expenditure ceiling is threatened, the Government must, according to the Budget Act, take measures to prevent that it is exceeded. The Act does not specify the measures that are possible, but one possible course of action for the Government is to propose to the Riksdag that the ceiling be raised. It is established practice not to change fixed expenditure ceilings, but a system has also emerged which allows the ceiling to be changed in the context of a change of government. The expenditure ceiling was also changed when the joint reservation of M and KD won the budget vote in autumn 2018. The ceiling for the third additional year is proposed in the Budget Bill, but the Government can propose an amended ceiling for the current year in an amending budget. It has never happened before that the Government has proposed an increased expenditure ceiling other than in the case of a change of government³⁷, but if the circumstances are extreme, there is therefore no obstacle for the Government to do so.

The debt anchor is not an operational target but a benchmark for gross government debt over the medium term. A debt level of 35 percent of GDP is estimated to provide both satisfactory distance from the EU debt limit of 60 percent and sufficient scope to deal with an economic crisis. If the debt is outside the range of 30-40 percent of GDP, the Government must explain in a letter to the Riksdag why the deviation has arisen and how it intends to deal with it. The debt anchor does not therefore set a strict limit on public debt, but rather serves as a medium-term benchmark.

The current coronavirus crisis is very deep, the progress is rapid and the consequences are extremely difficult to predict. If measures taken by the authorities in response to the crisis lead to significant deviations from the surplus target or the debt anchor, or to a need to increase the expenditure ceiling, this does not mean that the framework has lost its purpose or has expired. Instead, it should be viewed as a way for the authorities to make use of the flexibility allowed by the framework. The framework aims both to contribute to resilience in public finances to meet the demographic development, and to create a financial buffer that can be used in deep recessions and unforeseen crises. It therefore does not prevent the

³⁷ We are ignoring so-called technical adjustments here.

Government from taking action to curb the coronavirus crisis and limit its effects. On the contrary, the framework has helped to build a financial buffer that can and should now be used.

The coronavirus crisis involves extreme conditions and the crisis requires extreme measures. Under normal circumstances, major deviations from budgetary policy objectives and increased expenditure ceilings would damage the fiscal framework and probably also have political repercussions. However, the current circumstances are not normal, and the use of the flexibility of the system in an emergency situation is, in our view, entirely in line with the objective of the framework.

In the longer term, however, the need for fiscal discipline, long-term sustainability and a financial buffer to deal with economic downturns will be as great as it is today. Demographic developments and probable lower productivity developments in the public sector continue to put pressure on public finances and the framework continues to play a crucial role in maintaining sound public finances in the long term (Chapter 4). The fiscal framework will therefore be as important after the crisis as it was before the crisis.

2.2 The surplus target

The surplus target is formulated so that public sector net lending should average 1/3 percent of GDP over a business cycle. The target is defined over a business cycle because net lending is affected by economic activity and should also be allowed to vary over the same. In the event of an economic upturn, net lending is strengthened by increasing tax revenues and reduced transfer expenses. In the event of an economic downturn, the opposite is true. If net lending were not allowed to fluctuate over the economic cycle, fiscal policy would have to counteract fluctuations by being expansionary in boom times and restrictive in recessions. This would result in a pro-cyclical policy and be destabilising for the economy.

If there is a deviation from the surplus target, the Government is obliged under the Budget Act to present a plan in order to return to the target. This obligation applies if the deviation is clear. The Government refers to the following definition to clarify what is meant by a target deviation: "A deviation from the surplus target

exists if the net lending in the current or next year clearly deviates from the target level." ³⁸

The main indicator for the surplus target is thus the structural, i.e. the cyclically adjusted, net lending. In order to calculate structural net lending, actual net lending must be corrected. The correction is based on the differences between the current resource utilisation and a theoretical state where the economy is in balance, and thus depends on where the economy is in the business cycle. There are no official statistics on structural net lending, rather it involves calculation of hypothetical net lending that can neither be identified nor confirmed, even in retrospect. It is therefore common for structural net lending to be revised not only in forecasts but also retroactively and that the forecasts differ between different analysts. ³⁹ Structural net lending is thus uncertain and based on several assumptions and assessments, both of the economic situation and of the impact of cyclical fluctuations on public finances.

The surplus target is sometimes described as met if structural net lending is 1/3 percent of GDP each year. However, this description is incorrect. The fact that structural net lending in a given year amounts to 1/3 percent of GDP is not the same as the surplus target being met, and if structural net lending is less than 1/3 percent of GDP, this does not as such mean that the target is not met.⁴⁰ We estimate that structural net lending needs to deviate by at least 0.5 percent of GDP from the target level in order for the deviation to be considered clear.⁴¹ At the same time, such a numerical limit must be seen in context. For example, if structural net lending deviates systematically by, for example, 0.4 percent of GDP from the target level, the target will not be met over time even though the deviation each year is too small to be considered clear. A deviation of less than 0.5 percent of GDP may therefore indicate, if it is permanent, that the target will not be met.

The Government also assesses whether the surplus target has been met in the past, using a retrospective eight-year average (see Section 2.2.3). However, the Government does not report eight-year averages that include forecasts. The Council's task is to make an

³⁸ Framework document, Government letter 2017/18:207 p. 3.

³⁹ For example, the structural net lending for 2013 and 2014 reported in VP19 is stronger by about 0.5 per cent of GDP than that reported for the same year in BP19.

⁴⁰ Swedish fiscal policy 2015, Box 2.1, p. 61–63.

⁴¹Swedish Fiscal Policy 2018 p. 40.

informed overall assessment of whether there is a deviation from the surplus target, and we believe that eight-year averages that also cover future years are relevant to the assessment. Valuable information is available for the current and next year. In September, when the Budget Bill is presented, a preliminary outcome for half of the current year is available, and a calculation that includes the measures proposed in the Bill is available for the following year. For the second and third additional years, the information is more uncertain. The Government's calculation method normally leads to a strengthening of public finances by around 0.5 percent of GDP per year and therefore systematically gives an overly positive picture of net lending, which must be taken into account when estimating whether the target is met. The target cannot therefore be seen as met when an average that includes years of unchanged policies reaches a certain level. Nevertheless, the rolling average, which includes the next few years, provides information on whether net lending is approaching or moving away from the target – information that should normally be taken into account in an overall assessment of the surplus target.

In order to evaluate the surplus target, we compare calculations from the Government, NIER and the Swedish National Financial Management Authority (ESV), but such comparisons must be made with caution. They are based on different macroeconomic materials, they are made at different times and using different methods. The Government and the ESV assume so-called unchanged policies for the second and third years. 42 Their calculations are therefore based on the assumption that no new fiscal decisions are taken. This is not likely, of course, but the aim is not to make a realistic forecast but to calculate the scope for fiscal measures going forward. Instead, NIER's methodology aims to provide a forecast of the most likely developments. NiER therefore assumes in its calculations that the staff density is maintained in the publicly funded activities and that the standard is improved in accordance with previous developments. NIER also assumes that structural net lending will be in line with the surplus target in a few years' time. The calculations then show whether this development fits within public resources. NIER uses the concept of transfer to households in order for the calculation to

⁴² In addition to the measures adopted, the Government also includes announced proposals in the calculations.

square. If public resources are not sufficient, a transfer from households to the public sector is reported and vice versa.

The Government's and ESV's methods seek to determine the scope for fiscal measures in the future given the current regulatory system, while NIER's method seeks to determine what public resources are needed if welfare services are to be maintained while the surplus target is reached. Neither of these methods is more correct or wrong than the other. They are based on different assumptions and serve different purposes. However, it is important to bear in mind the methodological differences when comparing and interpreting the calculations.

2.2.1 Surplus target autumn 2019 – a forwardlooking perspective

In BP20, financial net lending for 2019 was estimated at 0.4 percent of GDP and structural net lending at 0.0 percent of GDP (Table 2.1). In 2020, net lending was expected to weaken slightly, but adjusted for the subdued economic development, structural net lending was expected to build up to 0.2 percent of GDP. The Government considered that fiscal policy was essentially neutral and that this was well balanced in the current economic situation. The Government considered that the small deviations from the target level in 2019 and 2020 did not constitute clear deviations and that the policy was in line with the surplus target.

In its October 2019 forecast, which took into account BP20 measures, NIER calculated structural net lending of 0.2 percent of GDP in 2019 and 0.0 percent of GDP in 2020, i.e. somewhat stronger than the Government in 2019 and slightly weaker in 2020. NIER estimated that this was tight in relation to the surplus target. ANIER's calculations pointed broadly to the fact that the estimated tax revenues with today's rules correspond to what was needed to cope with an unchanged welfare commitment. Deviously, the implication is that all measures beyond maintaining welfare must be financed if the surplus target is to be achieved. For the years 2021 and 2022, the difference against the Government's estimates was big for both

⁴³ NIER (2019a).

⁴⁴ NIER estimated a total deficit of SEK 8 billion in 2021-2023.

actual and structural net lending, but this was largely due to differences in calculation methods.

ESV's November 2019 forecast gave a more negative picture of public finances. Structural net lending in 2019 and 2020 was estimated at -0.6 and -0.3 respectively, and according to ESV that this meant that structural net lending deviated clearly from the target level of 1/3 percent of GDP.

Table 2.1 Government net lending according to the Government, NIER and ESV, forecasts from autumn 2019

| 10:000000 ::0:::0:::0:::0:::0:::0:::0::: | | | | | | | | | |
|------------------------------------------|------|------|------|------|------|--|--|--|--|
| | 2018 | 2019 | 2020 | 2021 | 2022 | | | | |
| Fiscal net lending | | | | | | | | | |
| BP20 | 0.9 | 0.4 | 0.3 | 0.4 | 1.2 | | | | |
| NIER, October 2019 | 0.8 | 0.4 | -0.1 | 0.0 | 0.2 | | | | |
| ESV November 2019 | 0.8 | 0.0 | -0.3 | -0.1 | 0.5 | | | | |
| Structural net lending | | | | | | | | | |
| BP20 | 0.0 | 0.0 | 0.2 | 0.5 | 1.3 | | | | |
| NIER, October 2019 | -0.2 | 0.2 | 0.0 | 0.1 | 0.3 | | | | |
| ESV November 2019 | -0.5 | -0.6 | -0.3 | 0.1 | 0.6 | | | | |

Note: Percentage of potential GDP.

Source: BP20, NIER (2019a) and ESV (2019).

The uncertainty in the calculation of structural net lending is significant and we therefore believe, as in the past, that structural net lending should deviate more than 0.5 percent of GDP from the target level in order for a deviation to be considered clear. No such deviation existed during the autumn, according to the Government's or NIER's calculations. The Council's assessment is that, based on the economic forecasts in 2019, there was no clear deviation and fiscal policy was in line with the surplus target.

2.2.2 Surplus target autumn 2020 – a forwardlooking perspective

In the spring of 2020, the Swedish economy and the world economy were crippled by the coronavirus pandemic. The situation could be described as a standstill for large sections of society and is unprecedented in modern times. The dramatically negative and very rapid developments meant that all forecasters had to make major downward revisions to the economic outlook and public finances. There was extreme uncertainty on many levels – the spread and effects of coronavirus infection, how long quarantine-like conditions and the

shutdown of the economy in Sweden and large parts of the world would be in force, what measures the Government and RIksdag would implement, etc.

On 1 April, NIER published its regular forecast⁴⁵ with estimates up to 2021. Net lending was projected to fall by SEK 192 billion from 2019 to 2020, reaching -3.5 percent of GDP in 2020. Structural net lending was projected to fall from 0.3 percent to -1.3 percent of GDP between 2019 and 2020. The Government's proposed and announced measures during the spring amounted, when NIER made its estimate, to about SEK 80 billion and NIER estimated that the Government would, over the year, propose measures equivalent to an additional SEK 70 billion. Together with the measures in BP20, NIER thus envisaged measures for 2020 totalling approximately SEK 180 billion. Of these SEK 180 billion, approximately SEK 140 billion were measures directly related to the coronavirus crisis. NIER's calculation assumed that the coronavirus crisis would subside towards the end of the year.46 The public finances were then projected to strengthen in 2021 mainly because temporary expenditure in 2020 of approximately SEK 100 billion will fall away and the temporary reduction in social security contributions will end. NIER estimated structural net lending in 2021 at -0.2 percent of GDP (Table 2.2).

In VP20, the Government projected a general government net lending of -3.8 percent of GDP for 2020, i.e. lower than the Stability Pact's limit of -3 percent of GDP. ⁴⁷ Structural net lending in 2020 was estimated at -0.9 percent of GDP. In relation to BP20, actual net lending weakened by just over 4 percent of GDP and structural net lending by just over 1 percent of GDP. The measures in spring 2020 were expected to weaken net lending by approximately SEK 100 billion, but this was largely expected to be temporary. In the following years, the scope of the measures will shrink and both actual and structural net lending will improve significantly. The rapid improvement is based on the assumption that the crisis will be short-

⁴⁵ NIER (2020a).

⁴⁶ NIER stressed the high level of uncertainty and also presented alternative economic scenarios.

⁴⁷ The European Commission stated on 13 March that it intended to use the flexibility of the Stability Pact to allows for coronavirus-related budget weakening (COM(2020) 112). The Council of Ministers also decided on 23 March, following a proposal from the Commission (COM(2020) 123), to activate the so-called general escape clause of the Stability and Growth Pact, which means that the Pact's normal budget requirements can be waived in order to manage the economic impact of the pandemic.

lived and, on the other hand, that the policy will remain unchanged after 2020, i.e. that no further fiscal measures will be taken. Under these conditions, structural net lending is projected to return to 0.6 percent of GDP in 2021, and then rise rapidly to 1.7 percent of GDP in 2023.

The Government assessed in VP20 that for 2020 there was a clear deviation from the surplus target, but that the deviation was justified on stabilisation policy grounds. The Government also estimated that net lending would return to the target level within the forecast period, i.e. by 2023, but stressed that there was considerable uncertainty and that more measures could be needed if economic activity continues to weaken.

After VP20, the Government has presented further measures. More generous short-term work allowance rules are expected to increase the cost of the measure from around SEK 20 billion to SEK 50 billion. On April 30, support for businesses was also presented based on the decline in sales in March-April in relation to the same period last year. The support was estimated to cost just under SEK 40 billion.

On 29 April, NIER also presented a forecast update with a much more negative picture than the one presented in the Swedish Economy on 1 April. The calculation indicated a 7 percent decline in GDP and a net lending rate of -6.3 percent in 2020.

On 24 March 2020 ESV published a forecast based on information up to 12 March. Net lending in 2020 was estimated at -0.5 percent of GDP, but ESV underlined that the uncertainty in the calculations was exceptional and therefore chose to publish two alternative scenarios. The most pessimistic alternative was a net lending rate of -3.3 percent of GDP in 2020. The forecast did not include any estimates of structural net lending or any assessment of the budgetary targets.

Table 2.2 Government net lending according to the Government, NIER and ESV forecasts from spring 2020

| Torccasts from Spring 2020 | | | | | | | | |
|----------------------------|------|------|------|------|------|--|--|--|
| | 2019 | 2020 | 2021 | 2022 | 2023 | | | |
| Fiscal net lending | | | | | | | | |
| ESV, March 2020 | 0.4 | -0.5 | -0.2 | 0.3 | 1.0 | | | |
| NIER, 1 April 2020 | 0.4 | -3.5 | -1.9 | | | | | |
| VP20 | 0.4 | -3.8 | -1.4 | 0.1 | 1.5 | | | |
| NIER, 29 April 2020 | 0.4 | -6.3 | -3.2 | | | | | |
| Structural net lending | | | | | | | | |
| NIER, 1 April 2020 | 0.3 | -1.3 | -0.2 | | | | | |
| VP20 | 0.4 | -0.9 | 0.6 | 1.2 | 1.7 | | | |

Note: Percentage of GDP.

Source: VP20, NIER (2020a, 2020b), ESV (2020).

All in all, based on the 2020 Budget Bill, the Council, like the Government, considers that there was no clear deviation from the surplus target last autumn and that fiscal policy was in line with the target at that time.

However, the deep crisis triggered by the coronavirus pandemic has inevitably led to a sharp deterioration in public finances. According to the Government(VP20), structural net lending for 2020 was estimated to fall below the target level of about 1.2 percent of GDP and according to NIER (1 April) by about 1.6 percent of GDP.

During the short period between VP20 and the publication of this report, NIER, the Riksbank and the Government presented calculations, all of which pointed to a significantly worse development in 2020 than according to VP20. On 29 April, NIER projected net lending in 2020 at -6.3 percent of GDP, i.e. a deterioration by 3 percent of GDP since the forecast on 1 April. The Government also presented, in several stages, comprehensive measures in addition to those included in the Bill.

The Council shares the Government's opinion that there is clear deviation from the surplus target. In view of the very special circumstances of the large, rapid and extremely difficult effects of the current pandemic, we, like the Government, believe that the deviation is justified. In the Council's assessment, the discrepancy does not conflict with the fiscal framework (Section 2.1). Further action may be needed from the Government and if the shutdown of large parts of the economy is lasting, the effects will be extremely severe.

If there is a clear deviation from the surplus target, the Government is obliged to present a plan in order to return to the target.

According to the Fiscal Framework Document, such a plan should be accompanied by a timetable and normally begin with proposals in the Budget Bill for next year. ⁴⁸ In our view, however, it is too early to assess with any reasonable certainty to what extent the coronavirus crisis will erode public finances. It is therefore unreasonable to expect the Government to present, at this early stage, a plan for the return to the surplus target. While the calculations in VP20 show that savings are expected to rise rapidly from 2021, this requires both a short-term crisis, a rapid recovery and no further action being taken, and the Council does not consider this can be treated as a plan to return to the surplus target. However, when the acute crisis is over, the Government should urgently return to the target.

The underlying rationale for maintaining the framework and maintaining stable and sustainable public finances – i.e. the lower productivity development of the public sector, demographic developments, rising welfare resource needs and the need for a buffer for future economic downturns and crises – remains.

2.2.3 The surplus target in a backward-looking perspective

In addition to the forward-looking assessment of the surplus target, in order to detect systematic deviations from the surplus target, the Government also assesses the achievement of targets in a backward-looking perspective. ⁴⁹ The follow-up is carried out using an eight-year average of actual net lending. This indicator is, unlike structural net lending, to measure and observe. However, it is not certain that an eight-year period will coincide with a business cycle, nor is it possible to establish with certainty the nature of the economic situation over a certain eight-year period. Instead, the eight-year horizon is adapted to extend over two terms of office and form part of the basis for the review of the surplus target at the end of every other term of office.

The Government reports the eight-year average for actual net lending only for years where there are outcomes. BP20 only reported the average for 2011-2018, which amounted to -0.1 percent of GDP. The Government noted that this was below the target level.

⁴⁸ Fiscal Framework Document, SKR. 2017/18:207, p. 15.

⁴⁹ In accordance with the proposal of the Surplus Target Committee and with the framework document (Skr. 2017/18:207).

However, it was not clear whether the Government considered this to be a systematic deviation, or whether the deviation was compared with the current target level of 1/3 percent of GDP or with the previous target level of 1 percent of GDP.

In our opinion, in order to assess whether there have been systematic deviations, the outcomes should be compared with the targets in force in the years in question. Between 2007 and 2018, the target was 1 percent of GDP and from 2019 it was reduced to 1/3 percent of GDP. The eight-year average in 2011-2018 was thus around 1.1 percent of GDP lower than the target in force at the time and about 0.4 percentage points lower than the current target.

The eight-year backward-looking average only started to be used in 2019, but it may still be interesting to examine the extent to which the measure would have indicated systemic anomalies if it had been used in earlier. The 1 percent target applied between 2007 and 2018. There are therefor five 8-year periods in which the target was in force (2007-2014, 2008-2015, etc.). Between 2007 and 2014, the average was at its highest, reaching 0 percent of GDP, and in 2009-2016 it was at its lowest at -0.5 percent of GDP. In the years when the 1 percent target applied, 2007-2018, the outcome fell short of the target by at least 1 percent of GDP for all 8-year periods (Table 2.3).

In part, these eight-year averages are affected by the 2009 financial crisis. Savings fell rapidly from 2008 to 2009, and were 1.7 percent below the then current target of 1 percent of GDP. The rapid weakening was, in our view, stability policy-driven and justified, and the Council argued in the 2009 report that the Government should have pursued even more expansionary policies. However, the deviation from the surplus target was significantly greater in 2012-2014 than in the crisis year 2009. The deviations in the eight-year averages are therefore not primarily due to an overly expansionary crisis management policy, but rather to the fact that deficits were not recaptured during the recovery following the financial crisis.

If the 8-year average had been used between 2007 and 2018, the conclusion would have been that there were systematic deviations from the surplus target.

Table 2.3 Follow-up of surplus target, backward-looking eight-year average, BP20

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------------------|------|------|------|------|------|------|------|------|------|
| Fiscal net lending | -1.6 | 0.0 | 1.0 | 1.4 | 0.9 | 0.4 | 0.3 | 0.4 | 1.2 |
| Eight-year average | 0.0 | -0.4 | -0.5 | -0.2 | -0.1 | 0.0 | 0.1 | 0.4 | 0.7 |
| Structural net lending | -0.6 | -0.1 | 0.5 | 0.7 | 0.0 | 0.0 | 0.2 | 0.5 | 1.3 |

Note: The figures for the eight-year average show the average for a period ending in the respective year. The column for 2016 thus refers to the years 2009-2016, the column for 2017 refers to 2010-2017, etc. BP20 only includes the eight-year average for 2018. The other eight-year averages have been prepared according to our own calculations.

Source: BP20 and own calculations.

As previously, the Council notes that overall the surplus target has not been achieved in a backward-looking perspective.⁵⁰ We believe it is important for fiscal policy to be designed in such a way that the kind of systematic deviation from the surplus target that has existed in the past is avoided in the future.

2.2.4 Distribution of net lending

Net lending is unevenly distributed between the three parts of the public sector, central government, local government sector and the old-age pension system. According to BP20 projections, the old-age pension system is showing a small surplus in 2019-2022, while the local government sector has annual deficits in its net lending of 0.8 percent of GDP over the same period. However, the deficit of the local government sector is offset by surpluses in the central government so that the total public sector shows surpluses.

Table 2.4 Public sector savings by sub-sector

| Table 2.4 Fublic sector savings by sub-sector | | | | | | | | | | |
|-----------------------------------------------|------|------|------|------|------|------|------|------|------|------|
| | 20 | 19 | 2020 | | 2021 | | 2022 | | 2023 | |
| | BP20 | VP20 |
| Central government | 1.1 | 1.2 | 1.0 | -2.8 | 1.1 | -0.7 | 1.8 | 0.7 | - | 2.0 |
| Local government | -0.8 | -1.0 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | - | -0.7 |
| Old-age pension system | 0.1 | 0.1 | 0.1 | -0.1 | 0.2 | 0.1 | 0.2 | 0.1 | - | 0.2 |
| Public sector | 0.4 | 0.4 | 0.3 | -3.8 | 0.4 | -1.4 | 1.2 | 0.1 | - | 1.5 |

Source: VP20 and BP20.

The local government sector as a whole, i.e. all municipalities and regions taken together, were estimated according to BP20 to meet the balance requirement by a good margin. This may seem

⁵⁰Fiscal Policy Council, 2018 (Section 2.2.6.).

contradictory but is due to the fact that the results and net lending of the local government sector refer to different concepts. The difference between them mostly lies in the way investments are managed. In net lending, an investment is included when physical resources are used, for example when a building is built. On the other hand, the result only includes depreciation, i.e. the cost of the same building is distributed over its estimated economic life. This means that as investments are on an upward trend, the result tends to be better than net lending. A deficit in net lending can therefore also be compatible in the longer term with the local government sector meeting the balance sheet requirement and complying with so-called sound economic management.

According to BP20, the income of the local government sector would develop more slowly in the coming years than they did in 2016-2018, which was due both to the fact that the tax base was projected to grow more slowly and that a declining number of asylum seekers and new arrivals were projected to dampen migration-related government contributions. Spending was also projected in BP20 to increase more slowly than in recent years.

The population has grown rapidly in recent years, but growth has slowed since last year. Local government sector investments have been large and growing and investment needs remain significant going forward (Figure 2.1). However, the rapid growth rate of local government investment is expected to slow down from 2019.

Fixed gross investments at current prices, SEK billion n ■ Regions ■ Municipalitites

Figure 2.1 Local government sector investments

Source: NIER (2020a).

In February 2020, the Riksdag initiated a proposal to allocate approximately SEK 2 billion to the local government sector and the Government announced in connection with this that it would add an additional SEK 5 billion to the local government sector in the spring amending budget in April. In the spring of 2020, the situation changed rapidly with the spread of the coronavirus, which created an urgent need for measures in municipalities and regions. On 11 March the Government announced that it would reimburse municipalities and regions for additional costs related to the virus outbreak. In the spring amending budget, the Government contributed an additional SEK 15 billion to the general government grant for 2020, i.e. a total of SEK 20 billion, and announced that SEK 12.5 billion of the contribution would be a permanent increase.

VP20 shows that the local government sector is suffering significantly from the coronavirus crisis both through falling tax revenues and acute additional costs, while the state injects significant additional resources into the sector. Net lending in the local government sector is not expected to be significantly affected by the crisis, rather the weakening affects the central government sector almost exclusively (Table 2.4). However, the calculations assume that the local government sector's expenditure will be adjusted to meet the balance sheet requirement, which means that according to VP20

the development of municipal consumption will be relatively weak over the next few years.

Several factors continue to put pressure on the finances of the local government sector. Population growth creates great needs in schools, health care and care for the elderly. The costs of upper secondary education are expected to increase significantly. However, expenditure on reception centres for refugees is expected to decrease, dampening overall expenditure pressures. In addition to funding problems, an increased need to expand welfare services may also entail difficulties in recruiting the necessary staff and create pressure on increased wages in the welfare sector (see Chapter 4 on long-term sustainability of the public finances). Local government resources will be stretched in the coming years. In order to maintain both the level of welfare and at the same time meet the balance requirement, it will be necessary to have some combination of tax increases, increased state contributions and rationalization and streamlining of operations.

2.2.5 Surplus target level

In autumn 2019, calls were made in favour of lowering the surplus target. The arguments in favour of this included the fact that an approaching recession may require increased scope for active fiscal policy, that there are lagging long-term needs in welfare and infrastructure, that the low interest rate conditions make borrowing cheap, gross government debt is unnecessarily low or may fall below the lower limit of the debt anchor range, i.e. below 30 percent of GDP.⁵¹ The arguments are based on both long-term and permanent as well as short-term and cyclical needs.

The surplus target is a key element of the fiscal framework, and there were several rationales behind the surplus target: restoring confidence in public finances, reducing the need for foreign borrowing, creating scope for stability policies and helping to address the economic pressures of demographic change.

In 2019, the target was lowered from 1 to 1/3 percent of GDP on average over a business cycle. The reason for the reduction was that

⁵¹ However, the sustainability projections in Chapter 4 do not indicate that a development where debt falls below 30 per cent of GDP is likely. Developments in spring 2020 in connection with the coronavirus crisis make such a low level of debt even less likely.

conditions have changed since the target was introduced in 2000. The surplus target study found that public debt had decreased significantly as a share of GDP since the surplus target was introduced and that confidence in Sweden's economy and public finances was high. Furthermore, the study assessed that cost pressures were likely to increase in the coming decades as a result of demographic developments and that this spoke in favour of lowering the surplus target. The choice of target level was a balance between the need for safety margins in a deep recession and the value of higher spending or lower taxes that would be made possible by a lower surplus. A target level of 1/3 percent of GDP was estimated to provide a gross government debt of 35 percent of GDP over the medium term and sufficient scope to deal with a deep and prolonged recession.

It is important to point out that the surplus target, like the fiscal framework as a whole, provides significant room for manoeuvre in the event of cyclical fluctuations. The target also allows for room to comply with the requirements of the EU legal framework.

Another argument in favour of lowering the surplus target that has appeared in the debate is that the low interest rate entails a logical contradiction between the surplus target and the debt anchor of Maastricht debt of 35 percent of GDP. According to this reasoning, a surplus of 1/3 percent of GDP is not compatible with the debt anchor at the currently low interest rates, but leads to a significantly lower level of debt. Therefore, if the debt anchor is to be at its current level, the surplus target needs to be significantly lower. However, the reasoning leading to this conclusion is based on an incorrect premise. The low interest rate situation does mean that the so-called primary net lending (net lending excluding interest and property income) that is compatible with the debt anchor may be lower. However, the surplus target does not relate to primary net lending but rather to the whole of general government savings including interest and property income. Therefore, when public interest costs decrease, there creates room within the surplus target that can be used for increased expenditure or reduced taxes. Thus, a reduction in interest expenditure leads to an increase in the economic

scope for other measures. However, it does not affect the relationship between the surplus target and the debt anchor. 52

NIER published its annual sustainability report in February 2020, i.e. the calculations were made before the outbreak of the coronavirus crisis. The overall conclusion in the baseline scenario is that, if welfare is to be maintained at the current level, public finances need to be permanently strengthened by around SEK 30 billion in order for public finances to be sustainable. Another conclusion of the report is that public finances are sustainable if the surplus target is maintained until the next regular review and then, from 2027, lowered to a balance target. The sustainability calculations thus indicate that prioritisations will be needed to comply with the framework.

The fiscal framework with the surplus target creates long-term rules for public finances. It does not force the Government to pursue any particular economic policy, but creates processes that contribute to the sustainable development of public finances. The framework rules strike a balance between the need for short-term flexibility and resilient and sustainable public finances in the long term. The new target has only been in force for just over a year and we believe it would be unfortunate to change the target after such a short period of time. If the target is changed by a simple parliamentary majority, the political consensus on the framework, which was manifested in the Surplus Target Committee, would certainly also be damaged.

However, the levels of the surplus target and the debt anchor are not carved in stone. Economic, demographic or political developments may justify changes in levels in the future. Nevertheless, in order for the framework to apply in the long-term and be credible and not to be changed due to cyclical fluctuations or shifting political majorities, some inertia towards change is needed. However, the inertia must not be so great as to make it impossible to make changes to the framework. In order to address this contradiction, in 2019 a method was introduced to review surplus targets and debt anchors in an orderly manner. The levels must be evaluated and, if necessary, reviewed by the Riksdag every eight years, i.e. every other term of office. This means that the next review will be carried out at such a time that a change in the target level can take

⁵² See the appendix for a technical analysis.

effect from 2027. The assessment should be made towards the end of the next term of office.

The Council has written on these issues on several occasions, stressing the importance of the fiscal framework having broad political backing and stability over time.⁵³ However, what constitutes the most appropriate level of the surplus target is a political assessment. In the 2014 report, we pointed to calculations that showed that a balance sheet target was probably also consistent with both long-term financial sustainability and a sufficient buffer to meet an economic downturn. In its response to the Government's evaluation of the surplus target made in 2010, the Council wrote that it is not possible to specify with much certainty exactly what target level is most appropriate, but that the very existence of a target for net lending is likely to be of great importance. Both experience and research indicate that there is a strong tendency in fiscal policy to short-term considerations to dominate over long-term considerations, which may lead to substantial accumulation of debt. Such tendencies are counteracted by clear balance targets. For the target to be credible and stable, it must have wide political support and the review and reporting of the target must be clear and transparent. The Council stated, and still believes, that these issues are as important, and perhaps more important, than the exact level of the target.

Demographic developments place great demands on resources for welfare, but in our opinion there is no reason to change the level of the surplus target in the near future. The Council considers that there are good reasons to stick to the model of reviewing surplus targets and debt anchors every eight years. Changes to the fiscal framework should be made in an orderly manner, preceded by solid analysis and with the widest political consensus possible.

2.3 The debt anchor

The debt anchor is a benchmark for fiscal policy, bringing the consolidated gross government debt (so-called Maastricht debt) to 35 percent of GDP in the medium term. If the gross debt deviates from the benchmark by more than 5 percentage points for the most

⁵³ See, for example, Swedish Fiscal Policy 2014 and 2015.

recently ended, current or next year, the Government must explain in a special letter to the Riksdag why the debt deviates from the benchmark and what the Government intends to do about it.

At the end of 2019, the actual debt ratio was practically equal to the benchmark, but in connection with the coronavirus crisis, Government debt is increasing (Table 2.5) partly as a direct result of measures to support the economy and partly because the sharp economic downturn leads to significant loss of government revenue and automatic increases in transfers. In addition, a declining GDP in itself leads to a rise in the debt ratio. For 2020, both the Government and NIER expect that the debt will be close to the upper limit of the range.

In VP20, the Government estimates that by 2020 Maastricht debt will amount to 39.9 percent of GDP and then gradually fall to just over 32 percent of GDP by 2023. However, this assessment assumes the crisis will be short-lived and that no additional measures will be introduced. Since the debt is not expected to exceed 40 percent of GDP in the current year and then fall, the Government is not obliged to submit a letter to the Riksdag. Potentially, a letter on the debt development may need to be submitted to the Riksdag in connection with the Spring Bill, i.e. in spring 2021.

The debt development forecasts, like other forecasts, are extremely uncertain at present and the estimates are changing very rapidly. This may be illustrated by the Government's proposal for more generous rules for short-term work allowances presented on 14 April and not included in VP20. The cost of the more generous rules for the public finances depends on the extent to which the allowances will be used, and the Government presented a range from 13 to just over SEK 100 billion. ⁵⁴ At the end of April, the cost was estimated at approximately SEK 50 billion. On 30 April, additional support for businesses was presented based on a decrease in turnover and the cost was estimated at SEK 39 billion.

Another way of illustrating the uncertainty of the calculations is through the alternative scenarios presented by the Government in VP20. In the pessimistic scenario, GDP in 2020 will fall by 10 percent (compared to a reduction of 4.2 percent in the main scenario) and the recovery will take longer. In this scenario,

⁵⁴ Presentation slides from the Government's press conference on 14/4 2020. Refers to costs exceeding the SEK 20 billion previously budgeted for short-term work allowance.

unemployment is estimated at 13.5 percent (9 percent in the main scenario). The weaker development means that public finances are weakened sharply both by reduced tax revenues and by increasing expenditure as unemployment rises. Net lending for the years 2020 and 2021 is projected in this scenario at -9 percent and -7 percent of GDP respectively. Gross debt is projected to be 49 percent of GDP in 2020 and projected to continue to rise to 53 percent of GDP in 2021. Although the scenario is based on a significantly poorer development than that assessed by both the Government and NIER at the beginning of April 2020, it clearly shows that the impact on public finances as a result of a deeper and more protracted downturn could be very substantial.

NIER's forecast of 1 April 2020 showed a slightly smaller decline in GDP than VP20, but gross debt is still estimated at around 41 percent of GDP, i.e. just outside the tolerance range of the debt anchor. On April 29, NIER presented a forecast update with a GDP drop of about 7 percent and a gross debt in 2020 of about 45 percent of GDP.

The Council assesses that the gross debt will fall outside the tolerance range for the debt anchor.

Table 2.5 Public sector consolidated gross debt

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------------|------|------|------|------|------|
| BP20 | 34.8 | 33.4 | 31.8 | 29.6 | - |
| NIER, October 2019 | 35.1 | 34.5 | 33.8 | 33.3 | - |
| VP20 | 35.1 | 39.9 | 38.3 | 36.2 | 32.4 |
| NIER, 1 April 2020 | 35.9 | 40.9 | 39.7 | - | - |
| NIER, 29 April 2020 | 35.1 | 44.7 | 44.2 | - | - |

Note: The debt anchor refers to the consolidated gross debt of the public sector, the so-called Maastricht debt.

Source: BP20, VP20, NIER (2019) and NIER (2020a, 2020b).

2.4 The expenditure ceiling

Under the Budget Act, the Government must propose an expenditure ceiling for the third year ahead in the Budget Bill. The 2021 Budget Bill should therefore include a draft expenditure ceiling for 2023. It is also common practice for the Government to present an assessment of the expenditure ceiling for the third year in the Spring Bill. In VP19, therefore, the Government presented its assessment that the expenditure ceiling for 2022 should amount to SEK 1,498 billion, corresponding to 27.0 percent of potential GDP. In BP20,

the Government proposed setting the expenditure ceiling at SEK 1,502 billion, which, after a technical correction, corresponded to the assessment in the Spring Bill.⁵⁵ The proposed level of the expenditure ceiling therefore did not imply any real change in relation to the assessment in VP19.

The Council has previously criticised the fact that the Government does not present any principled view of how the expenditure ceiling should be set. According to the Framework Document, the level of the expenditure ceiling is an expression of the Government's view of how its public commitment should develop. It also states that the level of the expenditure ceiling is, in the long term, crucial for the overall tax level and should therefore be consistent with the view of how much tax can reasonably be collected.⁵⁶ Therefore, as we have argued previously, it would be very reasonable for the Government to discuss its view of the desirable development of expenditure and revenues over three years as part of the economic and budgetary policy guidelines.

According to the Framework Document, the expenditure ceiling must provide the conditions for achieving the surplus target and promote the desired long-term development of government expenditure. In the explanatory memorandum to the level of the expenditure ceiling, the Government describes in the Budget Bill how the ceilings are developed in relation to GDP, to the previous year, to expenditure development over a longer period of time, etc., but does not give any principled view of how the expenditure ceilings are set.

In recent years, expenditure ceilings have been set in such a way that they have not been binding. Budgeting margins have been large and expenditure ceilings have allowed significantly higher expenditure increases than can fit within the surplus target. The Government stresses that the expenditure ceiling should not be seen as an expenditure target and that reforms should be tested against the surplus target. Of course, both budgetary restrictions apply in parallel and reforms must respect both. However, if the expenditure ceilings are so high that they will never actually be binding, they do not

⁵⁵ The technical adjustment is largely due to the proposed lower tax rate for pensioners. This reduces municipalities' tax revenue, which the state compensates for by way of increased government contributions.

⁵⁶ Fiscal Framework Document, SKR. 2017/18:207, Section 7.1.

contribute to achieving the surplus target and they cease to have a practical function. It is also difficult to see in what sense, in this case, the expenditure ceiling is "an expression of the Government's view of how its public commitment should develop".⁵⁷

As a result of the M-KD reservation winning the Riksdag's budget vote in autumn 2018, the expenditure ceilings were significantly reduced for the years 2019-2021 (Table 2.6). For 2020 and 2021, the Riksdag decision meant that the expenditure ceilings were set SEK 87 billion and SEK 66 billion below what the Government had proposed and that the budgeting margins were about SEK 100 billion lower in both 2020 and 2021. In spring 2019, the Government decided to maintain the lower levels and did not comment specifically on this matter in the Spring Bill. In BP20, the Government also does not comment on the changed expenditure ceiling levels. If the expenditure ceilings had really been an expression of the Government's view of how the public commitment should develop, or how much tax can reasonably be collected, then the Riksdag's sharp reduction in the ceilings should have had some sort of impact or at least prompted a comment.

⁵⁷ Fiscal Framework Document, SKR. 2017/18:207, p. 19.

⁵⁸ The Parliamentary Committee on Finance 2018/19:FiU1.

Table 2.6 The expenditure ceiling

| | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------------------------------------|-------|-------|-------|-------|-------|
| BP19 (September 2018) | | | | | |
| Expenditure ceiling | 1,401 | 1,475 | 1,496 | - | - |
| Percentage of potential GDP | 28.0 | 28.4 | 27.8 | - | - |
| Budget margin | 93 | 153 | 162 | - | - |
| Percentage of capped expenditure | 7.1 | 11.6 | 12.1 | - | - |
| The Riksdag's budget decision (December 2018) | | | | | |
| Expenditure ceiling | 1,351 | 1,388 | 1,430 | - | - |
| Percentage of potential GDP | 27.0 | 26.8 | 26.6 | - | - |
| Budget margin | 40 | 46 | 64 | - | - |
| Percentage of capped expenditure | 3.1 | 3.4 | 4.7 | - | - |
| VP19 (April 2019) | | | | | |
| Expenditure ceiling | 1,351 | 1,388 | 1,439 | 1,498 | - |
| Percentage of potential GDP | 27.4 | 27.1 | 27.0 | 27.0 | - |
| Budget margin | 39 | 43 | 67 | 110 | - |
| Percentage of capped expenditure | 3.0 | 3.2 | 4.9 | 8.0 | - |
| BP20 (September 2019) | | | | | |
| Expenditure ceiling | 1,351 | 1,392 | 1,443 | 1,502 | - |
| Percentage of potential GDP | 27.4 | 27.2 | 27.1 | 27.1 | - |
| Budget margin | 36 | 40 | 56 | 93 | - |
| Percentage of capped expenditure | 2.8 | 3.0 | 4.0 | 6.6 | - |
| VP20 (April 2020) | | | | | |
| Expenditure ceiling | 1,351 | 1,742 | 1,443 | 1,502 | 1,540 |
| Percentage of potential GDP | - | 33.9 | 27.1 | 27.3 | 27.0 |
| Budget margin | 43 | 300 | 36 | 73 | 101 |
| Percentage of capped expenditure | 3.3 | 20.8 | 2.5 | 5.1 | 7.0 |

Note: Billion SEK, unless otherwise stated.

Source: BP19, BP20, VP19, VP20 and the Parliamentary Committee on Finance (2018, bet. 2018/19:FiU1).

Possibly, the Government's principle for how the expenditure ceiling is set may be that it should be a constant share of potential GDP. The Government referred to this principle in 2015 but has not commented on it since. However, the proposed 2020 expenditure ceiling submitted in BP20 amounted to the same share of potential GDP as the 2019 ceiling, which may indicate that the principle is still applied. However, it is difficult to reconcile the principle that the expenditure ceilings should be a constant share of potential GDP with the fact that the Riksdag lowered the ceiling by more than a whole percentage point of GDP without the Government commenting on it. At the same time, it should be noted that until this year the expenditure ceiling has generally declined as a percentage of GDP since its introduction in 1997 (Figure 2.2).

When public finances are presented with so-called unchanged policies, there is a gradual calculation increase in the budget of about 0.5 percent of GDP per year. The budget space that is created automatically occurs predominantly on the expenditure side. However, this does not necessarily mean that it is also used for measures that increase expenditure. The distribution of the space between measures on the revenue and the expenditure side, respectively, is a political issue.

Percentage of GDP

Figure 2.2 Expenditure ceiling as a percentage of GDP 1998-2020

Note: The increase in the expenditure ceiling for 2020 proposed in VP20 is not taken into account in the graph. Source: NIER (2020b).

There are established guidelines on the minimum size of the budgeting margin based on the margins deemed necessary to address normal computational uncertainty. However, if the expenditure ceilings were to be set as equal to the level of expenditure under unchanged rules plus an uncertainty margin, the ceiling would decline regularly as a percentage of GDP. The budgeting margin must therefore include scope for expenditure-enhancing measures. However, there are no guidelines on the size of such a scope for measures.

Based on the situation in autumn 2019, when the Budget Bill was presented, the Council assessed that the expenditure ceiling was not under threat and that the budgeting margins were at acceptable levels.

⁵⁹ For an in-depth understanding of the automatic budget strengthening, see NIER (2019a).

However, developments in the spring show that the situation can change quickly and unexpectedly. The committee initiative on increased resources for municipalities and regions, which was not related to the coronavirus outbreak, increased expenditure by approximately SEK 1.7 billion. Since then, the Government has in a short time presented a series of additional amending budgets as well as a regular amending budget in connection with VP20. Taken together, these changes to the 2020 budget are projected to increase the burden on the public finances by approximately SEK 170 billion (Table 3.1).

It was evident even before VP20 was presented that the expenditure ceiling for 2020 would need to be raised. 60 There is an established practice that the expenditure ceiling changes only in the case of government changes, and the Government writes in VP20 that the socio-economic consequences of such changes could in the longer term be major. However, there are no formal obstacles for the Riksdag to change the expenditure ceiling and the Framework Document states that the expenditure ceiling may need to be adapted to new, completely changed external conditions. In VP20, the Government also refers to the 2013 Spring Economic Bill, in which the Government stressed that fixed expenditure ceilings could be changed in rare cases to maintain an appropriate stability policy provided that the long-term sustainability of public finances was not threatened. The Government argues that the coronavirus outbreak is an external factor that justifies raising the expenditure ceiling for 2020 so that fiscal policy can be adapted to the new conditions.

The proposal in VP20 increases the expenditure ceiling for 2020 by SEK 350 billion, from SEK 1,392 billion to SEK 1,742 billion, an increase equivalent to just over 7 percent of GDP. The capped expenditure for 2020 is estimated at SEK 1,442 billion, which results in a remaining budgeting margin of SEK 300 bn, or about 21 percent of the capped expenditure. The ceiling increase thus includes all the measures proposed so far and projected cyclical expenditure changes and also leaves a margin of SEK 300 billion. The increase is thus

⁶⁰ The Finance Minister also announced at a press conference that the expenditure ceiling for 2020 would need to be raised and that the Government intended to deal with this matter in the Spring Bill.
⁶¹ On 14 April, the Government also presented a proposal regarding more generous rules for short-term work allowances. This measures is not included in the VP20 calculations.

sufficiently generous to accommodate very substantial additional measures and fiscal stimulus.

There is considerable uncertainty surrounding the continued development and impact of the coronavirus crisis and it is not possible to have a clear idea today of the extent to which the spending capacity may need to be used. The same can be said for 2021 and 2022 and for these years the Government is not currently proposing any changes to the expenditure ceilings. However, this is not because previously established expenditure ceilings are deemed to be sufficient, but rather because the Government wants to wait for developments in the autumn in order to be able to make a better assessment of expenditure needs in the coming years.

The Government considers that the measures in response to the virus outbreak are largely temporary. The bulk of the increase in expenditure is projected to fall away after 2020. It is currently extremely difficult to assess to what extent the expenditure ceilings for 2021 and 2022 may need to be raised, and there is no reason for the Government to commit, already in the spring, to a certain level of expenditure ceilings for the coming years. Any proposals regarding an amended expenditure ceiling can be included in BP21.

In the Council's view, it is clear that the coronavirus pandemic has drastically changed the conditions for fiscal policy, and that expenditure ceilings set under more normal circumstances should not now have to constitute an obstacle to the Government. The proposed increase in the expenditure ceiling for 2020 is very large but must be seen in the light of the fact that it is extremely difficult to estimate the need for more measures and that the Government likely wishes to avoid making further changes to the expenditure ceiling. Our assessment is that the increase in the expenditure ceiling is justified and that the fiscal framework does not put any obstacles in the way of such an increase.

2.5 The budget process

On 13 February 2020, the Parliamentary Committee on Finance adopted a so-called committee initiative for an additional amending budget, allocating an additional SEK 2.5 billion to municipalities and

regions.⁶² The contribution was financed mainly by the withdrawal of proposals for so-called entry deductions and development time, announced in BP20 and planned to be submitted to the Riksdag later in the spring,.⁶³ The opposition parties M, KD, SD and V supported the initiative, which thus received the support of a majority in the Riksdag.

The Riksdag's budget process is designed for the budget to be treated, as much as possible, as a whole and thus facilitates a coherent economic policy. The process is based on both rules and practices, and the political consensus around the process is generally strong. The latest changes, in which the surplus target was lowered and the debt anchor was added, were also implemented after a parliamentary inquiry and with broad support in the Riksdag. Nevertheless, there are differences of opinion regarding the implementation of budgetary governance. The budget rules strike a balance between the right of the Riksdag the majority to decide, and the desire for a single process in which the budget options are set against each other as a whole and which makes it easier for minority Governments to govern even in difficult parliamentary situations. Where the line should go in this balancing exercise has been investigated on several occasions. The parliamentary Budgetary Governance Inquiry⁶⁴ failed to reach agreement in all parts. Questions regarding the budgetary governance were re-examined in 2017 and the inquiry proposed some amendments of the committee's right to take initiatives in budgetary matters. 65 However, the inquiry failed to agree on this occasion as well and the proposals were not implemented.

Another initiative was taken by the Parliamentary Committee on Finance in autumn 2013 and meant that part of the recently adopted framework decision would not be implemented. The framework decision included an increase in the cut-off point for state tax, but the initiative stopped the increase. The decision was preceded by an intense debate on the interpretation of the rules of the Riksdag Act (RO) on the framework decision, which provide that the income

⁶² The Parliamentary Committee on Finance 2019/20:FiU49.

⁶³ The proposals had been announced in BP20 and the bills were to be submitted in the spring. The budgetary impact of the announced proposals was included in the BP20 estimates. Technically, the Riksdag therefore did not withdraw the proposals, but only amended the income calculation.

⁶⁴ SOU 2013:73.

⁶⁵ SOU 2017:78.

⁶⁶ The Parliamentary Committee on Finance 2013/14:FiU16.

⁶⁷Riksdag Act, Chapter 11 Section 18.

calculation and the spending framework should be adopted by a single decision. 68 The question was finally settled by the Committee on the Constitution (KU), which stated that the Parliamentary Committee on Finance's initiative did not violate the RO. KU supported its position with two main arguments, first that the RO did not explicitly prohibit budget revenue from deviating from revenues adopted in the framework decision, and second, that the proposal would lead to stronger public finances and was therefore in line with the intentions of the budget rules on a strict budget process. The then current governing parties, M, KD, C and L, made reservations against KU's position which, in their opinion, meant that it was now possible to amend the budget after the framework decision, regardless of whether such amendment would lead to weakening or strengthening the public finances, since the RO makes no such distinction. 69 The Council commented on this break from the framework decision in the 2014 report and expressed concern over the fact that the budget process had been weakened and that the prospects for minority governments to have their draft budgets pass through the Riksdag had deteriorated.⁷⁰

There are both similarities and differences between the Parliamentary Committee on Finance's initiatives in autumn 2013 and spring 2020. In the autumn of 2013, the initiative was about reversing part of the framework decision for the coming year, and the point at issue concerned a tax matter. There were differences of opinion as to whether or not the amendment to the framework decision was contrary to the rules of the Riksdag Act. The Committee's initiative in spring 2020, on the other hand, concerned an amendment to a budget in the current year, and the amendment concerned both revenue and expenditure. The initiative was not challenged on purely formal grounds, but since the so-called autonomous right of initiative was introduced for all committees (1971), KU has repeatedly stressed that the right of initiative should be exercised cautiously and that political consensus should be strived for.⁷¹

The two initiatives thus differed in technical terms, but the underlying problem – how the ambition to have an orderly and

⁶⁸ The Speaker's judicial inquiry considered that the initiative violated RO. Fredrik Sterzel expressed the same view at a public hearing on 28 November 2013.

⁶⁹ Report 2013/14:KU32, Alliance Government parties' unanimous reservation.

⁷⁰Swedish Fiscal Policy 2014, Chapter 6.

⁷¹ Report 2013/14:KU32.

coherent budgetary process should be balanced against a parliamentary majority's ability to make budgetary decisions – was essentially the same.

The two committee initiatives display different possibilities for amending the overall budgetary decision without explicitly violating any formal provisions. However, when the Riksdag reversed part of the framework decision in autumn 2013, it effectively departed from the principle of a coherent budgetary process. The Riksdag took the initiative to amend a budget during a current year for the first time in spring 2020. This also meant that the principle of a coherent budgetary treatment had to give way.

One argument that has been used to support the initiatives in both 2013 and 2020 is that the measures do not weaken the budget. The amendment to the budget decision in autumn 2013 increased tax revenues and the 2020 amendment did not affect the balance. Therefore, the initiators argue, the changes were in line with the intentions behind the budgetary process, namely that it should be rigorous.

The Council is of the opinion that if the Riksdag amends previous budget decisions, while it is certainly preferable that the changes are funded rather than not funded, it would be unfortunate to have a practice whereby the Riksdag can freely amend the budget as long as the public finances are not weakened.

The budgetary process is designed to ensure that the budget is seen as a whole and the process facilitates the implementation of economic policies by minority governments. The budget may certainly need to be amended in current years, and this is normally done by the Government adding an amending budget in connection with either the Spring Bill or the Budget Bill. However, additional amendments to the budget may damage the ability to implement consistent and coherent economic policies even if the amendments are balance neutral. The guiding principle should be, rather, that the framework decision is respected to the extent possible throughout the process, i.e. both before the beginning of the financial year and during the current year.

⁷² The Government may also submit amending budgets at other times if there are special reasons (Budget Act, Chapter 9, Section 6). Under normal circumstances, this possibility is rarely used, but in spring 2020 a series of amending budgets were submitted.

In the 2014 report, we expressed concern over the fact that the budgetary process had been weakened. In our view, the spring 2020 Parliamentary Committee initiative further weakens the process.

2.6 Assessments and recommendations

Based on the 2020 Budget Bill, the Council considers that there was no clear deviation from the surplus target at the time the budget was decided and that fiscal policy was in line with the surplus target.

The coronavirus pandemic in spring 2020 has led to a dramatic economic downturn. The combination of comprehensive measures and a sharp downturn in the economy means that public finances are weakening significantly. This will lead to a clear deviation from the surplus target but does not imply a breach of the framework. In the Council's view, the deviation is duly justified and fits within the flexibility provided by the framework. The framework aims both to create resilience in public finances and a financial buffer in case of deep recessions and unforeseen crises. This buffer can and should now be used.

In the Council's view, given the speed and unpredictability of the crisis, it is still too early to have a clear idea of the impact of the coronavirus crisis on public finances. It is therefore unreasonable to expect the Government to present, at this early stage, a plan for the return to the surplus target. In the longer term, however, it is important for the Government to return to the surplus target. The needs for fiscal discipline, long-term sustainability and a sufficiently large buffer will be equally pressing once the coronavirus crisis is over.

The Council notes that the surplus target has been undercut for a long time and we believe it is important that fiscal policy should be designed so that it does not systematically lead to net lending that is too low in relation to the surplus target.

In autumn 2019, there was no reason to believe that the expenditure ceiling would be threatened or that the budgeting margin for 2020 would be insufficient. However, the coronavirus pandemic quickly changed the situation. In VP20, the Government proposed that the expenditure ceiling for 2020 should be increased by SEK 350 billion and was open to making adjustments, in the autumn BP, to the expenditure ceilings for 2021 and 2022. The increase is very large

but must be seen in the light of the exceptional economic downturn and that additional measures may be needed to counteract the crisis. The Council considers that the increase in the expenditure ceiling proposed in VP20 was justified and that the framework does not put any obstacles in the way of the Government's measures.

In VP20, the Government expected gross government debt to reach 39.9 percent of GDP by 2020 and thereafter to decrease, i.e. that the debt would not fall outside the tolerance range of 30-40 percent of GDP. In its economic assessment of 29 April, NIER expected a gross debt of about 45 percent of GDP in 2020. The Council assesses that the gross debt will fall outside the tolerance range for the debt anchor.

During the autumn and early spring, there was a discussion on whether the surplus target should be lowered to a balance target. The surplus target was lowered in 2019 from 1 to 1/3 percent of GDP and a system for reviewing the target every eight years was introduced. The Council sees no compelling reason to change this procedure.

The political support for the budgetary process remains good, but there are tendencies that support for the process is weakening. The Parliamentary Committee initiative in spring 2020 represents a departure from the Riksdag's budgetary process practice and, in the Council's opinion, contributed to weakening the budgetary process.

3 Stabilisation policy opportunities and limitations of fiscal policy

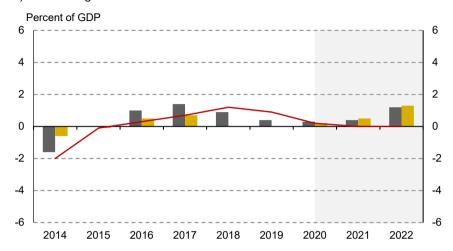
In this chapter, we discuss how the fiscal stance relates to cyclical developments in the economy. We have already noted that the negative economic effects of the coronavirus pandemic have very quickly taken effect and that economic activity has decreased drastically in most countries. In Chapter 2, we noted that there is a clear deviation from the surplus target, but that this is well-justified and does not conflict with the fiscal framework. In spring 2020, it is extraordinarily difficult to make an economic forecast for the current and future years. Therefore we will not make a regular assessment of whether the fiscal policy stance is consistent with cyclical developments in the economy. Instead, we will discuss whether the measures taken so far by the Government are adequate and sufficiently rapid and comprehensive to deal with the economic problems of the crisis (Section 3.2). We will also discuss measures that the Government will need to implement at a later stage to stimulate demand in the economy. The analysis is based, inter alia, on the experience of the financial crisis of 2008-2009 (Section 3.3). However, we begin by analysing how the fiscal policy proposed by the Government in BP20 related to the cyclical developments in the economy in autumn 2019 (Section 3.1).

3.1 Fiscal policy in BP20

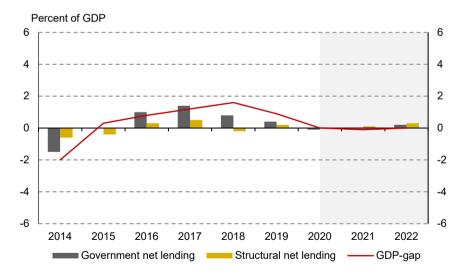
The Swedish economy was in a clear slowdown phase in autumn 2019. Most forecasters expected a balanced economic development in 2020. International trade conflicts and the uncertainty surrounding Brexit weighed on the global economy, which affected Swedish exports. Employment growth slowed down in 2019 and unemployment rose slightly. Figure 3.1 shows the development of net lending and the GDP gap over time according to BP20 and according to NIER in October 2019.

Figure 3.1 Financial and structural saving and GDP gap 2013-2022 projected autumn 2019

a) The Budget Bill for 2020



b) NIER October 2019



Source: BP20, Volume 1, Annex 2, Table 14, p. 13 and NIER (2019a).

In BP20, the Government assessed that fiscal policy was in line with the surplus target and argued that the policy was essentially neutral in 2019 and 2020. According to the Government, the fiscal policy in BP20 – given the economic situation – was balanced.⁷³ The Council shares the Government's assessment.

3.2 The coronavirus pandemic and economic policy

The coronavirus pandemic has led to sharp falls in economic activity worldwide. In addition, there is considerable economic uncertainty caused by the pandemic, but also uncertainty about the political decisions that will be taken. All in all, as a result of this, the world economy is experiencing both a supply and a demand shock. Unlike the financial crisis of 2008-2009, this crisis was not caused by fundamental imbalances in the world economy. However, it cannot be ruled out that a protracted crisis could reinforce and trigger existing imbalances that may exist in the international financial market. Traditional stabilisation policies have usually been designed to deal with one type of shock at a time. This does not apply to the coronavirus crisis. The Swedish Government and other governments are now facing a unique and extraordinarily difficult task.

The overall objective of stabilisation policy is to maintain a high and consistent use of resources in the economy. Stabilisation policy does not currently have operational real economic target variables such as unemployment, growth or resource utilisation.⁷⁵ The basic idea of the framework is that an economic policy aimed at targets for public savings and for inflation is in a position to gain credibility and eventually lead to stable real economic development.

In two previous reports, we have set out our fundamental view on the stabilisation policy role of fiscal policy.⁷⁶ Briefly, we believe that, in the event of normal cyclical fluctuations, monetary policy should perform the task of stabilisation policy, supported by the automatic stabilisers of fiscal policy. However, monetary policy may

⁷³ BP20, p. 29.

⁷⁴ The oil crisis of the early 1970s is an exception.

⁷⁵ The Riksbank Committee's final report proposes that the Riksbank, without overriding the price stability objective, should take into account real considerations when formulating monetary policy, see Chapter 16, SOU 2019:46 A new Riksbank Law.

⁷⁶ Swedish fiscal policy 2017 Section 4.3 and Swedish fiscal policy 2018, Chapter 3.

exceptionally require the active support of fiscal policy. In situations where monetary policy is not sufficient to stop a falling utilisation of resources, fiscal policy – in addition to the contribution made by monetary policy – has the main responsibility for stabilising economic developments. The role of fiscal policy in such a situation is to stimulate demand and stabilise the real economy. Its role is not to help the Riksbank achieve the inflation the target, although this may be a side effect of expansionary fiscal policies.

In order to deal with the current crisis, support measures need to be adapted and focused on the specific economic problems caused by the pandemic. The timing of the measures implemented and the communication of the Government and the authorities of their decisions is crucial to the development of the crisis.

3.2.1 Measures in spring 2020

March 2020, the Government, the Riksbank, Starting in Finansinspektionen and the National Debt Office quickly introduced and coordinated a series of temporary measures (Tables 3.1 and 3.2). The measures cannot be described as incentives in the traditional stabilisation policy sense, but are intended to protect businesses and workers against the economic consequences of the pandemic. These emergency measures are intended to ensure that companies, without having to lay off their workforce, will survive a period of a few months of very weak demand and supply disruptions, while limiting workers' loss of income and trying to prevent unemployment from rising. It is hoped that the measures will allow for a rapid recovery in economic activity when coronavirus-related restrictions are phased out and demand returns. With these measures, the Government also hopes to reduce the risk that the fall in real economic activity will spread to the financial sector and cause a financial collapse of the kind that triggered the 2008-2009 financial crisis.

Table 3.1 shows that the net effect of the measures, together with the decisions taken previously, results in a weakening of public finances by around SEK 170 billion, or 3.4 percent of GDP. The financial crisis of 2008-2009 can serve as a reference point here: initially, measures were taken to burden the budget by approximately

SEK 40 billion, corresponding to 1.3 percent of GDP.⁷⁷ The Government's policy during the financial crisis is discussed further in Section 3.3.

Table 3.1 Government measures in response to the coronavirus crisis

| Government measures | SEK billions |
|---------------------------------------------------------------------------|--------------|
| Fiscal policy (budgetary impact 2020) | |
| Short-term work allowance 1 | 49 |
| Aid to enterprises based on reduced turnover | 39 |
| Temporary reduction in social security contributions | 33 |
| Increased general government contributions to the local | 15 |
| government sector | |
| Sick pay responsibility is transferred to the state ² | 7 |
| Strengthened unemployment insurance | 5 |
| Compensation for rental costs | 5 |
| Targeted funding for health care and care | 3 |
| Extended assignment for Almi | 3 |
| Sickness benefit instead of waiting period, scrapped medical | 3 |
| certificate on day eight and carrier allowance | • |
| More training places and scrapped income limit during studies | 3 |
| Extended labor market programmes | 3 |
| Support for culture, local journalism and sport | 1 |
| Increased testing for COVID 19 | 1 |
| Other measures | 1 |
| Total | 170 |
| Liquidity strengthening (maximum amount) | |
| Deferred tax ⁴ | 322 |
| Amendment of accrual fund rules | 13 |
| Total | 335 |
| | |
| Guarantees (maximum amount) | |
| Extended assignments for the Swedish Export Credit Agency and the Swedish | 125 |
| export credit | 400 |
| State loan guarantee (state business emergency) | 100 |
| Government loan guarantee to airlines | 5 |
| Total | 230 |

Note: The amounts in the table are in line with the Government's accounts on 30 April 2020. The amounts of the costs, liquidity supplements and guarantees presented depend in many cases on the extent to which different measures are used and in other cases on the duration of different measures. The amounts shown in the table refer to 2020. ¹On 14 April the Government amended the short-term work allowance rules to allow for a 80 percent reduction of employee working hours during May, June and July 2020. ²Valid during April and May. ³The measure also has a negative effect on tax revenues for 2019 of SEK -9 billion. ⁴The measure granted companies a right to defer payment of employer's contributions, preliminary tax on wages and VAT reported monthly or quarterly (the Government later changed this to also include VAT paid on an annual basis). The deferral applies to tax in three months and is granted for one year. The amounts therefor do not relate to public finance costs but to shifts from 2020 to 2021.

Source: VP20, Table 3.1, p.12 and updates from the Ministry of Finance.

⁷⁷ Bill 2008/09:97.

The extent to which emergency measures will burden public finances is currently unclear. This is partly determined by the extent to which various types of support will ultimately be used. Furthermore, it is unclear whether the measures are comprehensive enough to save jobs and businesses. Representatives of the Government and the Riksbank have stated that they are prepared to take further action should there be a need for this.

Table 3.2 Measures of the Riksbank and Finansinspektionen in response to the coronavirus crisis

| Measures of the Riksbank and Finansinspektionen | SEK billions |
|--------------------------------------------------------------------------------------------------|--------------|
| Lending (maximum amount) | |
| Sveriges Riksbank | |
| Loans to banks to ensure credit supply | 500 |
| Loans in US dollars to Swedish banks against collateral | about 600 |
| Finansinspektionen | |
| Lower countercyclical capital buffer, total SEK 25 billion ¹ | 900 |
| Total | 2,000 |
| Asset purchase (maximum amount) | |
| Sveriges Riksbank | 222 |
| Purchase of securities, including government, municipal, mortgage bonds and corporate securities | 300 |
| Total | 300 |

Other measures

Sveriges Riksbank

Reduced overnight interest rate to banks from 0.75 to 0.20 percentage points above the repo rate

Loans to the banks, unlimited against collateral with a threemonth maturity at an interest rate of 0.20 percentage points above the repo rate

Increased flexibility for bank collateral

Expanded monetary policy counterparty range

Finansinspektionen

Right for banks to make exceptions from amortisation requirements for all mortgage borrowers

Note: The table includes measures until April 30. ¹Finansinspektionen estimated that a reduced capital buffer will allow banks to lend an additional SEK 900 billion.

Source: Communication and decisions from the Riksbank and Finansinspektionen.

Temporarily reducing social security contributions, taking over responsibility for sick pay and abolishing the waiting period are examples of adequate, quickly implemented and comprehensive measures that provide tangible support for companies and individuals in the phase of the crisis experienced by the Swedish economy in spring 2020. The Riksbank's various liquidity-enhancing and market-management measures, Finansinspektionen's adjustment of the countercyclical capital buffer and exemptions from the amortisation requirement are also quickly implemented and adequate measures.

However, there are adequate measures whose design creates uncertainty of a kind that may defy their purpose. One example is the subsidy for fixed rental costs in vulnerable industries. In order for the subsidy to be available, the landlord and the tenant must first agree on a rent reduction. Only then will the landlord be able to apply for the grant. The current uncertainty as to whether a business is covered by the right to support seems to cause many landlords to hesitate, as they do not want to risk having to bear the full loss of a rent reduction. Meanwhile, tenant companies are forced to pay the regular rent. The subsequent conversion aid partly covers fixed costs such as rental costs, where any earlier reimbursement of rental costs is deducted from this aid. The problems caused by the previous rent support may thus be partly remedied.

Box 3.1 Joint package of measures in the European Union

On 9 April, Eurogroup finance ministers agreed on joint stimulus measures to mitigate the economic effects of the coronavirus pandemic. The agreement provided for measures of approximately SEK 5,800 billion, almost 3 percent of the EU's total GDP.

The measures have three different aspects, first approximately SEK 1,000 billion is set aside, available to all EU countries to borrow from the Union, to support the countries' increased costs of lay-offs and unemployment. A further SEK 2,000 billion is aimed at SMEs in the EU in the form of loans through the European Investment Bank. Finally, each Eurogroup country can borrow up to 2 percent of its GDP through the European Stabilisation Mechanism, as long as the money is used to finance healthcare-related costs. Loans to the member states as a whole may amount to a maximum of approximately SEK 2,400 billion. The package of measures was approved by the Council of Ministers on 23 April, when the European Commission was also given the task of starting to

⁷⁸ https://www.regeringen.se/artiklar/2020/03/stod-for-sankta-hyror-i-utsatta-branscher/.

implement the measures before 1 June. The flexibility in the use of structural funds from the EU budget has been increased so that it will be possible to use available funds for working capital for companies, healthcare-related expenditure and short-term work costs. The crisis instrument in the EU budget has been activated to cover emergency healthcare-related expenditure.

3.2.2 Fiscal policy in relation to economic developments

The emergency measures agreed by the Government and the Riksdag will result in a marked weakening of public finances in 2020. We believe that these measures do not conflict with the fiscal framework. Since BP20, the Riksdag has decided on measures as a result of proposals and notifications from the Government in six bills. Table 3.3 below presents the overall budgetary impact on general government net lending of all proposals and notifications in these bills (decisions and notifications after VP20 are not included in the table). As these are amending budgets, the financial impact of the proposals is to a large extent limited to 2020. The budgetary effects in Table 3.3 have been calculated in relation to the previous year and show the extent to which an active fiscal policy weakens or strengthens the public finances compared to the previous year.

⁷⁹ Supplementary amending budget for 2020 Measures in connection with the coronavirus (Bill 2019/20:132, report 2019/20:FiU51), Supplementary amending budget for 2020 Credit guarantees to air carriers due to the coronavirus (Bill 2019/20:136, report 2019/20: FiU52), Spring amending budget for 2020 (Bill 2019/20:99), Supplementary amending budget for 2020 Credit guarantees for loans to companies (Bill 2019/20:142, report 2019/20: FiU54), Supplementary amending budget for 2020 Additional measures in connection with the coronavirus (Bill 2019/20:146, report 2019/20: FiU56), and Supplementary amending budget for 2020 Additional measures in the fiscal area in connection with the coronavirus (Bill 2019/20:151, report 2019/20: FiU55).

Table 3.3 Total budgetary effects of measures up to and including VP20 in relation to the previous year, SEK billion

| | | | , | | |
|-----------------------------------------------------------------------------------------|-------|--------|-------|------|------|
| | 2019 | 2020 | 2021 | 2022 | 2023 |
| Total expenditure changes | 16.3 | 87.7 | -47.7 | -4.0 | -3.6 |
| Total income changes, net | -27.1 | -26.6 | 20.9 | 5.4 | 0.0 |
| Net effect of changes to income and expenditure on general government net lending | -43.3 | -114.3 | 68.7 | 9.4 | 3.6 |
| Percentage of GDP | -0.9 | -2.3 | 1.3 | 0.2 | 0.1 |

Note: The table shows the budgetary effects on general government net lending in relation to the previous year of reforms decided and announced earlier and proposed in VP20, and the funding of these. Billion SEK, unless otherwise stated. The overall budgetary impact of the emergency measures is now higher than reported in VP20. In the second half of April, the estimated cost of short-term work allowance (approximately SEK 30 billion) was increased and additional support for businesses based on reduced turnover (SEK 39 billion) was introduced.

Source: VP20 (Table 9.6, p. 99.

The estimated effects on public finances presented in Table 3.3 are likely underestimated. The day before VP20 was presented to the Riksdag, the Government agreed with the Center Party and the Liberals to increase short-term work allowance so that working hours can be reduced by up to 80 percent. In VP20, the cost of the original proposal was estimated at approximately SEK 20 billion. In the new extended proposal, the costs were estimated at SEK 50 billion. The Government also estimated the cost if the proposal were to cover 700,000 persons on average each month. This would result in a weakening of public finances by approximately SEK 127 billion. There is therefore considerable uncertainty about the ultimate impact on public finances.

The Government expects public finances to weaken sharply this year, both as a result of the economic downturn and the measures being implemented. Structural net lending, adjusted for variations in economic development and some one-off effects, is estimated to show the underlying level of net lending. Since the Government considers that the economic downturn is temporary, the effect on structural net lending will be smaller than on net lending. The Government estimates that there will be a deficit in structural net lending in 2020, but not in the years thereafter. Table 3.4 presents the Government's assessment in VP20 of extent to which the weakening is a result of the economic downturn and the emergency measures, respectively.

⁸⁰ The Minister of Finance at a press conference on 14 April.

Table 3.4 General government net lending 2020-2023 according to VP20, percent of potential GDP

| | Tr ze, percent er pete | a. - - - . | | | |
|-----|------------------------------------------------|-------------------|------|------|------|
| Row | | 2020 | 2021 | 2022 | 2023 |
| 1 | Fiscal net lending ¹ | -3.8 | -1.4 | 0.1 | 1.5 |
| | Adjustment of net lending taking into account: | | | | |
| 2 | GDP gap ² | -2.6 | -1.7 | -0.9 | -0.2 |
| 3 | Unemployment gap | -0.3 | -0.2 | -0.2 | 0.0 |
| 4 | Tax bases composition | 0.0 | -0.1 | -0.1 | 0.0 |
| 5 | One-off effects | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | Structural net lending | -0.9 | 0.6 | 1.2 | 1.7 |
| 7 | GDP gap ² | -5.2 | -3.6 | -1.9 | -0.4 |

Note: Percentage of potential GDP, unless stated otherwise. Outcome for net lending 2017-2019, forecast/estimate for 2020-2023. ¹ percent of GDP. ² The GDP gap is the difference between actual and potential GDP as a percentage of potential GDP. The overall budgetary impact of the emergency measures is now higher than reported in VP20. In the second half of April, the short-term work allowance was increased and additional support for businesses based on reduced turnover was introduced.

Source: VP20, Table 9.2, p. 95.

The difference between net lending and structural net lending is the net effect of the automatic stabilisers (second and third rows of Table 3.4) and the composition of the tax bases and one-off effects (if rows two to five in Table 3.4 are subtracted from row one, row six is obtained). Income and expenditure due to the economic situation develop more strongly and weakly, respectively, compared to the previous year in line with the change in resource utilisation. This effect on net lending is deducted from the calculation of structural net lending. In 2020 and 2021, resource utilisation in the economy is expected to be weak (seventh row) and automatic stabilisers thus seriously impair net lending (first row).

The Government's assumptions about the extent to which the economy will shrink this year and the rate of unemployment are crucial for the assessment of the development of public finances. If the economy shrinks more than the Government expects, the weakening of public finances will be greater. The Government further assumes that the economic situation prevailing in April 2020 will last only a few months and that the economy will then begin to recover. §1 This assumption is also subject to great uncertainty.

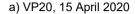
Figure 3.2 (a) shows the development of net lending and structural net lending according to the Government's calculations in

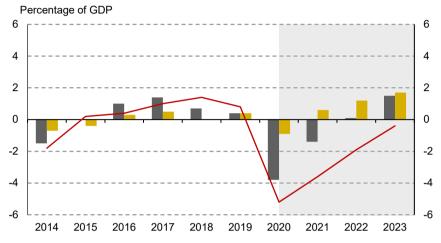
⁸¹ Bill 2019/20:100, p. 17.

VP20 and FIgure 3.2 (b) shows NIER's calculation from 1 April 2020. The figures also show the Government's and NIER's assessments of resource utilisation, measured by the so-called GDP gap. A comparison of Figure 3.2 with Figure 3.1 above shows the radical change in both the Government's and NIER's views on economic trends and public finances since last autumn.

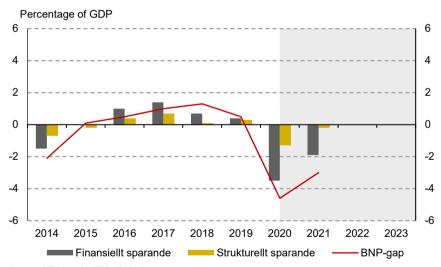
Table 3.4, row six, shows how structural net lending changes year by year. The annual change in structural net lending can in turn be allocated to a number of components. These components are shown in Figure 3.3 below. The black dots in the Figure show the change in structural net lending over the years. The bars show the different components of the change compared to previous years. The active fiscal policy in the figure corresponds to the overall budgetary impact of expenditure and revenue reforms shown in row three of Table 3.3. Active fiscal policy makes a negative contribution to structural net lending in 2020, but subsequently a positive contribution as measures to address the coronavirus crisis are terminated. The development of structural net lending is also explained by the development of net receipts from capital and the development of structural net lending in the municipal sector and the pension system.

Figure 3.2 Fiscal and structural net lending and GDP gap 2011-2022





b) NIER 1 April 2020



Source: VP20 and NIER (2020a).

Like the OECD and other international analysts, the Ministry of Finance uses the annual change in structural net lending as an indicator of how successful the Government's active fiscal policy measures are in terms of stabilisation policy. 82 Normally, this change

⁸² See Torvik (2016) for a discussion.

is a crude measure of the stabilisation policy orientation of fiscal policy (the 'fiscal stance'), and includes not only the active fiscal policy, but also several other factors, as shown in Figure 3.3 below. The fiscal tightening between 2020 and 2021 illustrated in the figure is explained by the fact that most of the emergency measures will cease at the end of the year. This is not for stabilisation policy reasons, but is an effect of the design of the emergency measures. If the change in structural net lending is interpreted in the usual way, such austerity is not justified. However, given the situation of the world economy in the spring of 2020, this measure cannot be interpreted in the same way as in normal economic development. Both the estimate of the GDP gap and the calculation of the costs of emergency measures are likely to be revised in the near future.

Percentage points 3 2 2 1 1 0 0 -1 -1 -2 -2 -3 2022 2020 2021 2023 Övriat ■ Pensionssystemets sparande Kommunsektorns sparande ■ Kapitalnetto ■ Aktiv finanspolitik Förändring av det strukturella sparandet

Figure 3.3 Change in structural net lending

Note: In VP20, the amounts for the various sub-components are rounded, so the sum of these items does not always match the change in structural net lending (black dots). The overall budgetary impact of the emergency measures is now higher than reported in VP20. In the second half of April, the short-term work allowance was increased and additional support for businesses based on reduced turnover was introduced.

Source: Table 9.3, p. 96 in VP20.

Since the emergency measures are justified for reasons other than stabilising the economic cycle – as we have pointed out at the outset – an assessment of whether the policy is well adapted to the economic cycle is not meaningful. We simply note here that both the emergency measures and the weakening of the economy place a

heavy burden on public finances, and reiterate that the aim of the emergency measures is to protect companies and workers from the direct harmful effects of the pandemic. While there may be parts of the economy that are not affected by the coronavirus crisis restrictions and that would be susceptible to fiscal stimulus, for most of the economy it makes sense to deploy traditional demand-stimulating fiscal measures only when the restrictions are dismantled. It is also only then that it will be possible to assess whether the policy is well balanced in relation to the economic situation. We discuss what may be required of such a policy in Sections 3.4 and 3.5 below.

3.3 Fiscal policy during the financial crisis 2008-2009

This section looks back at the financial crisis of 2008-2009 to get an idea of what fiscal measures may be required to stimulate demand in the economy once the coronavirus-related restrictions are dismantled.

Fiscal policy for 2009 was essentially laid down in the Government's Budget Bill in September 2008. A slowdown of limited magnitude was expected at that time. The GDP gap was assessed to be negative in 2008, and the Government predicted that GDP growth would fall to 1.3 percent in 2009 and that the GDP gap would amount to -1.7 percent. At the same time, it was assumed that general government net lending in 2008 would amount to 2.8 percent of GDP. Since saving had, for several years, been above the level of the surplus target at the time, the Government considered an expansionary fiscal policy was appropriate.83 The draft budget entailed public finances would weaken by approximately SEK 20 billion in 2009, equivalent to just over half a percent of GDP.84 The expansionary measures included, inter alia, a third step in the job tax credit, an increase in the tier limit for state income tax, a general reduction in social security contributions and an extension of the previous reduction in social security contributions for young people. In its report of May 2009, the Council considered that, given the

 $^{^{83}}$ According to Table 4.1, p. 94, Bill 2008/09:1, average fiscal net lending in the period 2000-2008 amounted to 1.5 per cent of GDP.

⁸⁴ Bill 2008/09:1, Table 1.4, p. 30.

information on the economic situation available at the time, the fiscal policy in the Budget Bill was well balanced.⁸⁵

The economic outlook deteriorated drastically after the 2009 Budget Bill was submitted to the Riksdag. In December 2008, the Government presented an emergency package that became a bill in January 2009. All in all, the Government's measures in the budget bill for 2009, the measures taken in autumn 2008 and the proposals presented in January 2009 amounted to just over SEK 40 billion for 2009. This resulted in an active weakening of public finances by around 1.3 percent of GDP.

In the 2009 Spring Bill, the Government estimated that GDP growth in the current year would amount to -4.2 percent. This represented a negative GDP gap of as much as 7.2 percent. The Government further assessed that the fall in GDP would end in 2010, but that resource utilisation would continue to decrease. Unemployment, which had already risen by just over two percentage points, was expected to rise to almost 12 percent.

In its report in May 2009, the Council made the assessment that Sweden was in an economic crisis that was fully comparable to the 1990s crisis. The Council considered that it was obvious that the weakening of the economy was so strong that the ability of economic policies to counteract it was limited. The Council thus shared the Government's view that it was not possible to prevent the economic downturn from having a major impact on production and employment in Sweden. At the same time, the Council stated that there were at least three strong arguments suggesting that the Government should have pursued a more expansionary fiscal policy than it had so far done:

- The reforms in the Budget Bill were not primarily designed to stimulate economic activity, but mainly aimed at strengthening long-term socio-economic efficiency.
- The drastic deterioration in the economic outlook since autumn 2008 led to a stronger fall in production and employment than could have been foreseen in the 2009 Budget Bill. If the starting

⁸⁵Swedish Fiscal Policy 2009 p. 5.

⁸⁶ Bill 2008/09:97, Measures for jobs and transition.

⁸⁷ Bill 2008/09:97, p. 43.

⁸⁸ Bill 2008/09:97, p. 13.

⁸⁹ Bill 2008/09:100, Annex 1, Table 14.

point in autumn 2008 was that fiscal policy should take account of the economic situation, the scope of the active measures proposed in the Government's Budget Bill should increase in connection with the subsequent dramatic economic deterioration.

• At the same time, the unemployment insurance reforms – which were expected to have overall positive long-term effects on employment – reduced the scope of insurance cover in the event of unemployment. It was therefore more important than before, the Council argued, to prevent people from becoming unemployed for cyclical reasons through stabilisation policies.⁹⁰

When the Council balanced different risks against each other in its 2009 report, the conclusion was that further fiscal stimulus would have been – and remained – desirable. Deficits in Sweden were significantly lower and the financial position (both net financial wealth and gross debt) more favourable than in most other OECD countries. The financial position of the public sector was also stronger than at the beginning of the 1990s crisis. In addition, there was a functioning fiscal framework and a pronounced political consensus on the importance of safeguarding the long-term sustainability of public finances. All in all, the Council argued, these circumstances created a fiscal margin for manoeuvre that the Government should use to an even greater extent.

In its 2009 report, the Council argued that further fiscal stimulus measures should be cost-effective: the demand and employment effects should be as great as possible in relation to costs. An example of such a measure, the Council said, was additional temporary state contributions to municipalities. The Council pointed out that existing research suggests that public consumption has a significant impact on overall demand. The Council considered that additional funds should be granted as early as 2009 in order to avoid redundancies in municipal activities. It is, the Council wrote, probably cheaper to achieve a certain level of employment by preventing redundancies than by later stimulating new employment. The Council also argued that state contributions to municipalities should be higher than the

⁹⁰Swedish Fiscal Policy 2009 p. 5-7.

Government had proposed in the 2009 Spring Bill.⁹¹ In addition to increased Government contributions to municipalities, the Council argued that further stimulus measures should primarily be aimed at low-income groups that are likely to have a high tendency to consume.

3.4 Short-term effects of fiscal policy

It makes no sense to introduce traditional demand-stimulating measures in the situation in spring 2020. There is therefore time to form an idea of what fiscal measures can stimulate the economy to a recovery when the economic standstill caused by the coronavirus pandemic ends. Based on the experience from the financial crisis of 2008-2009, in this section we therefore discuss what kind of measures are most effective to stimulate demand. In a calculation example, we examine what is needed to stimulate a large number of jobs.

In December 2016, NIER delivered a government assignment analysing the short-term impact of different fiscal measures on GDP and employment. 92 The five fiscal variables examined in the study are:

- public consumption,
- public investment,
- transfers to households,
- indirect taxes on consumer goods and
- direct taxes targeting households.

Table 3.5 compares NIER's study with a so-called meta-study conducted by Gechert and Rannenberg (2014) which compiles 98 analyses of fiscal policy. In its report, NIER draws three general conclusions on the impact on GDP.⁹³

⁹¹ In the 2009 Spring Bill, the Government proposed temporary economic aid of SEK 7 billion for 2010, which was disbursed in December 2009, Bill 2008/09:100.

⁹² The analysis is based on quarterly data for the period 1980-2015, Hjelm and Stockhammar (2016).

⁹³ The estimated point estimates are generally not significant at the 95 per cent significance level, which means that the results of the study are subject to significant uncertainty.

First, that fiscal measures generally have so-called Keynesian effects in Sweden. This means that increased Government spending or lower taxes increase GDP in the short term. The impact is greatest on public investment, followed by public consumption.

Table 3.5 Estimates of cumulative GDP multipliers after two years for the period 1993-2015

| 101 till politica 1000 = 010 | | | | | |
|------------------------------------------------------------------------------------------------|----------------------|----------------------|------------|-------------|--|
| | Public consumptio | Public Investment | T | T | |
| | n | S | Transfers | Taxes | |
| NIER (2016) Effects notwithstanding economic activity Effects in a recession | 1.5 1.6 | 1.7 1.9 | 1.3 0.8 | 0.8 1.1 | |
| Gechert and Rannenberg (2014) Effects notwithstanding economic activity Effects in a recession | 0.4 | 1.4 1.0 | 0.3 | 0.3 -0.5 | |

Note: Accumulated change in GDP in relation to accumulated change in the fiscal instrument." Effects notwithstanding economic activity" refer to so-called linear effects where different economic situations are not treated differently. The row "Effects in recession" shows the effect of fiscal policy in an identified recession. Gechert and Rannenberg (2014) is a meta-study in which the results of 98 studies and a total of 1,882 empirical estimates of GDP impacts of fiscal measures are brought together. Source: Hjelm and Stockhammar (2016) and NIER (2017).

For the entire time period, the average so-called cumulative multiplier for a weighted average of the five above-mentioned fiscal variables is around 1 both one and two years ahead.⁹⁴

Second, that there do not appear to be any general patterns in how the economic situation affects the impact of fiscal measures on GDP. However, the results are sensitive to how a recession is defined. If an average of the results from different definitions is used, the effect on GDP is about the same in recessions as in calculations where recessions are not separated. Fiscal policy therefore generally seems to be equally powerful, irrespective of whether it is applied in a recession or a boom.

Third, that NIER's estimated impact on GDP is, overall, slightly greater than an average of the estimates made in the international empirical literature.

The effects on employment are, in principle, exclusively Keynesian, i.e. employment increases (decreases) in the case of expansionary (tightening) fiscal measures (Table 3.6). For

⁹⁴ If the multiplier is equal to 1, GDP will increase by as much as public finances are weakened. For example, if public consumption increases by 1 per cent of GDP, GDP will increase by 1 per cent. In order for GDP to increase by more than public consumption, the multiplier must be greater than 1.

government expenditure – consumption, investments and transfers – the impact on employment is greater in the event of economic downturns. When economic activity is not taken into account, the effect of public consumption on employment is zero (although the GDP effect is positive, see Table 3.5 above). However, in economic downturns, employment increases on average by 0.4 percent when public consumption increases by 1 percent of GDP, both one and two years ahead. Public investment has the greatest impact on employment, both in general and in economic downturns.

Table 3.6 Effects on employment

Source: NIER (2017).

| TUBIC CIG EIICCCC CII | omploy mo | | | | |
|-------------------------------------------|-------------|-------------|-----------|----------|--------|
| | Public | Public | | Indirect | Direct |
| | consumption | Investments | Transfers | tax | tax |
| Effects notwithstanding economic activity | | | | | |
| Year 1 | 0.0 | 0.4 | 0.2 | 0.2 | 0.1 |
| Year 2 | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 |
| Effects in a recession | | | | | |
| Year 1 | 0.4 | 0.6 | 0.4 | 0.1 | 0.2 |
| Year 2 | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 |

Note: percentage change in employment in the event of a fiscal expansion equivalent to 1 percent of GDP. *Effects notwithstanding economic activity* refers to so-called linear effects where different economic situations are not treated differently.

It is important to have reasonable expectations of what fiscal policy can achieve. The following calculation examples give an idea of the impact on employment of different fiscal measures:

In Tables 3.7 and 3.8 below, based on the multipliers estimated by NIER and shown in Table 3.6 above, we have calculated the weakening of net lending that would be required to stimulate labor demand.

Table 3.7 Incentives to increase employment

| Table 3.7 incentives to increase employment | | | | | |
|---------------------------------------------|--------------------|-----------------------------------------------------|-------------------------------|-------------------------------|--|
| | | Deterioration in net lending as % of GDP to create: | | | |
| | Employ | 100,000 jobs | 150,000 jobs | 200,000 jobs | |
| Type of measure | ment multiplier | (about 2% of the labor force) | (about 3% of the labor force) | (about 4% of the labor force) | |
| Public | 0.4 | 5 | 7.5 | 10 | |
| consumption | | | | | |
| Public | 0.4 | 5 | 7.5 | 10 | |
| investments | | | | | |
| Transfers | 0.3 | 6.7 | 10 | 13 | |
| Taxes | 0.1 | 20 | 30 | 40 | |

Note: The employment rate change (2%; 3%; 4%) divided by the employment multiplier of the measure shows the weakening of net lending, e.g.: the measure of public consumption to save 100 000 jobs costs: 2/0.4 = 5 percent of GDP.

Source: Hjelm and Stockhammar (2016) and our own calculations.

As shown in Table 3.7, the measures differ in terms of how much a given weakening of public finances by means of the measure stimulates employment. For example, an increase in public consumption has a greater impact on employment than lower taxes. Note that an increase in public consumption in an area that is staff intensive, such as care for the elderly, has greater employment effects than if the increase in public consumption is a result of purchase of goods with a high import content, such as medicines. The type of public consumption thus determines the effect on employment.

Table 3.8 below shows the gross and net costs of the various measures presented in Table 3.7. The table shows that short-term gross costs per job are lowest for public investment and public consumption and highest for tax cuts.

Table 3.8 Gross and net cost per job

| rable old older and riot oddt por job | | | | | |
|---------------------------------------|------------------------------------|-------------------------------|--|--|--|
| Type of measure | Gross cost per job, SEK million | Net cost per job, SEK million | | | |
| Public consumption | 2.4 | 0.5 | | | |
| Public investments | 2.4 | 0.1 | | | |
| Transfers | 3.2 | 1.9 | | | |
| Taxes | 9.7 | 4.4 | | | |

Note: The cost per job of the measure is calculated in relation to the 2018 GDP. The calculation takes into account the short-term flat-rate self-financing rate by assuming that general government net lending increases by 0.5 percent of GDP when GDP increases by 1 percent. The GDP multiplier used in the calculation is taken from Hjelm and Stockhammar (2016). In practice, the degree of self-financing varies depending on the measure and the time horizon involved. The net cost is calculated by deducting from the increased tax revenues of an increase in GDP from the cost of the measure. Since the equation with which we calculated costs is linear, the gross/net cost *per job is* the same for different volumes of jobs created

Source: Own calculations.

However, it should be noted that although public investment has the lowest net cost per person employed, it may be problematic to use as a stabilisation policy instrument. The experience of the 1970s and 1980s shows that stabilisation policy-motivated measures in public investment were often started too late, thus helping to destabilise resource utilisation. Public investment cannot therefore, in general, be justified solely on stabilisation policy grounds. On the other hand, should it turn out that the economy is stuck in a recession, it may be necessary to accelerate planned socio-economically motivated public investment and thus stimulate demand.

The calculation example shows that substantial fiscal efforts are needed to fully counteract a sharp fall in employment with traditional stabilisation policies. Another conclusion is that it is likely to be more efficient to spend resources on public consumption than to focus policies on broad demand-stimulating measures such as general tax cuts or increased transfers to households. In this context, it is important to emphasise that stabilisation policy-motivated measures should be temporary. Measures which, for political or other reasons, are difficult to scale back and dismantle should therefore be avoided.

3.5 Discussion

Before the coronavirus crisis, Sweden had strong public finances, both historically and compared to other OECD countries. The sound public finances give the Government and Riksdag much more room for manoeuvre both during and after the crisis than if public debt had been high. Confidence in the Swedish economy and the Government's and the Riksdag's ability to pursue a long-term sustainable fiscal policy is high, as has been shown in international credit rating agencies' ratings of Sweden as a borrower. The Riksdag's ability to gather around a number of necessary decisions under great pressure shows that it is able to cope with a rapidly formed economic crisis. This ability will remain important in the years to come.

Starting in March, a range of temporary measures were introduced to protect businesses and households from the economic consequences of the pandemic. We believe that it is right to focus economic policy measures on reducing the harmful effects on businesses and households, so that viable businesses survive the crisis, unemployment does not become too high and household incomes are protected. This also reduces the risk of the crisis developing into a prolonged and deep recession. It is difficult to determine at this time whether the measures adopted to date are sufficient. At the same time, it is clear that more substantial financial support would have been required if more restrictive measures to limit the spread of infection had been implemented. The measures taken are effective and have been implemented quickly in several cases. However, there are examples of adequate measures (e.g. subsidy of rental costs) where the effects have been delayed and, in

⁹⁵ Fitch Ratings, for example, wrote in July 2019: "Sweden's AAA rating reflects its high per-capita income, persistent budget surpluses and declining public debt, strong governance and human development indicators, and a record of sound economic policy."

the worst case, may not be avoided. Implementation has proved to be complicated and time-consuming in these cases. ⁹⁶ The administrative system of the authorities for the management of emergency measures seems to lack, at least in part, the flexibility required by the situation. We recommend that the Government set up an inquiry to propose effective, quick and administratively simple measures with little risk of abuse that can be activated in the event of a drastic fall in activity in parts or all of the economy.

The management of the coronavirus crisis will inevitably lead to an increase in Maastricht debt. The amount of increase will depend on the extent of the measures put in place and the development of GDP. But even in the government's pessimistic scenario, the debt in 2021 remains below the upper limit of the Stability and Growth Pact (60 percent of GDP). Based on economic research, it is hard to draw any clear conclusions as to what a reasonable level of debt is. Economic theory does ascribe a clear economic policy function to public-sector gross debt: the debt should act as a shock-absorber and mitigate the effects of fluctuations in economic activity. On the other hand, economic theory says nothing specific about the right level of debt, or how high it should be allowed to be. However, in order for fiscal policy to function effectively in stabilisation policy, the public debt ratio should be at such a level that, in times of crisis, there is scope for significantly increasing debt. If the debt ratio is already at a low level, the debt may increase and fill the function of shock absorber during a crisis without the need to bring the debt back to any particular level in a short time after the crisis – the debt ratio can be allowed to fall "organically" as the economy grows. Empirically oriented research does not provide clear answers as to how large the debt can be. There is some empirical support for the idea that an economy may run into problems if debt is too high. A high level of debt may lead to higher interest rates and lead to lower growth in the long term. There is a certain consensus in the literature that debt is too high if it reaches 80-100 percent of GDP. 97 Fundamental

⁹⁶ In the case of reimbursement of rental costs, the delay was partly due to the fact that the measure required the approval of the European Commission, but also because there were uncertainties about the form of the aid, which has led to a cautious attitude among property owners.

⁹⁷ See Reinhart and Roggoff (2010). In the period 1719–2011, Sweden never had gross debt exceeding 90 per cent of GDP (Reinhardt et al., 2012). Since 2011, the Swedish debt level has been at a level of around 40 per cent of GDP with a falling trend. Swedish public debt was at its highest in the early 1990s when it rose to around 75 per cent of GDP.

economic parameters – such as growth prospects and interest rates – determine what is a reasonable level of debt, and there is always a good deal of uncertainty in projections of how these variables are likely to develop.⁹⁸

Ever since the late 1980s, interest rates have fallen relative to the growth rate. This has been a global phenomenon and until the coronavirus crisis there was little to indicate that the trend in development would be reversed. 99 If the interest rate below growth for a long period, there is scope for increasing the debt without future taxpayers having to finance this with higher taxes or lower government spending (see Box 3.2). 100 The Government's handling of a larger Maastricht debt will be helped i interest rates remain low after the coronavirus crisis is over.

In conclusion, we believe that the relatively strong public finances and the high confidence of the financial market give the Government and the Riksdag room for manoeuvre to take further measures during the year to protect Swedish companies and employees from the economic effects of the coronavirus pandemic. Even if further emergency measures become necessary, we believe that there is likely to be scope for the implementation at a later stage of traditional stabilisation policy measures. At the same time, the calculations in Section 3.4 show that we should not expect that an active fiscal policy can completely neutralise the consequences of a severe economic downturn. Given that the Riksbank's key interest rate is already at zero, there can be no significant traction from monetary policy when the coronavirus related restrictions are phased out. The Riksbank's main economic policy task will be, for the foreseeable future, to ensure the availability of liquidity and other marketmanagement efforts.

It is crucial that the fiscal stimulus measures implemented are cost-effective and socially beneficial. Existing research suggests that public consumption and investment have a strong impact on overall demand and should therefore represent the first fiscal measure once it makes sense to stimulate demand in the economy. ¹⁰¹

⁹⁸ See Box 1.1 of Chapter 1.

⁹⁹ Rachel and Summers (2019).

¹⁰⁰ Blanchard (2019).

¹⁰¹ In addition to the research we referred to in Section 3.5, see also Corsetti and Müller (2015) and the references in this chapter.

Box 3.2 "Interest-growth gap" and the need for future surpluses

If the real interest rate is lower than growth, there may be Increased room for manoeuvre for fiscal policy may be created where the real interest rate is lower than growth. To show how real interest rates and growth affect the development of Maastricht debt, we start from a simple equation describing the change in government debt

$$s_t - s_{t-1} = \left(\frac{r_t - g_t}{1 + g_t}\right) \times s_{t-1} - p_t$$

where s_t is Maastricht debt as a percentage of GDP, r_t is the real interest rate, g_t is the rate of growth in real GDP, and p_t is primary net lending, i.e. tax revenues minus public spending on consumption and investments, but excluding interest income and expenses as a proportion of GDP, all at date t. For convenience, we assume that primary savings are zero and that there is a debt in period t-1. In this case:

If
$$r_t > g_t \Rightarrow (s_t - s_{t-1}) > 0$$
, i.e. if the debt is growing.
If $r_t < g_t \Rightarrow (s_t - s_{t-1}) < 0$, i.e. if the debt is declining.

For Sweden, the interest rate growth gap has been negative during the last business cycle. Over the period 2008-2019, average real GDP growth amounted to 1.7 percent, while the 10-year government bond yield minus inflation averaged 0.2 percent. Maastricht debt as a percentage of GDP amounted to just over 40 percent in these years. According to the formula above, the contribution to the change in the debt ratio is $\left(\frac{r_t-g_t}{1+g_t}\right) \times s_{t-1}$. If we set the values for growth (0.017), the interest rate (0.002) and the debt ratio (0.4), we get ((0.002-0.017)/(1+0.017))×0.4 \approx -0.006. This means that the interest-growth gap made a negative contribution to the debt ratio, i.e. decreased the debt ratio by just over half a percent of GDP per year. The long-term sustainability of the public finances is discussed in Chapter 4.

¹⁰² During the period 1800-2018, interest rates were lower than growth in Sweden during 57 percent of the time (Muro and Zhou, 2019).

Citizens have high expectations of the Government's responsibility to prevent or limit damage caused by extraordinary events and to bear the costs incurred. During the spring, this took the form, among other things, of criticism from Swedes who were sojourning abroad and who argued that the Government should arrange their return trip. Another example is claims of forest owners in 2005, who sought to be compensated for the damage caused by storm Gudrun. According to the Swedish form of government, the government is regarded as the ultimate guarantor of the safety and security of all citizens. 103 At the same time, according to Swedish law, both the government and the individual have a responsibility to prevent accidents and to limit the effects of accidents. That responsibility is often covered by private insurance. However, there are cases where individuals fail to protect themselves by purchasing private insurance and there are certain risks of damage that insurance companies will not cover. In principle, the Government's responsibility begins where the individual is unable to resolve the situation. This also applies in the context of extraordinary events such as a pandemic. There are recent examples (storm Gudrun) where the Government has paid compensation in case of major disasters where the damage has not, for various reasons, been covered by insurance. However, this was not dictated by a clear regulatory framework but rather by the circumstances in the individual cases. In conclusion, we note that the Government's responsibility in extraordinary events is characterised by great uncertainty. 104 We believe that an inquiry is needed to clarify the Government's responsibility for the financial consequences of extraordinary events.

3.6 Assessments and recommendations

Starting in March, a range of temporary measures were introduced to protect businesses and households from the economic consequences of the pandemic. It is important to help viable businesses survive, to keep unemployment levels down and to protect household income as

¹⁰³ Chapter 1, Section 2 of the Constitution Act states that the fundamental objective of all public activities is the individual's personal, economic and cultural welfare. Furthermore, the Government must safeguard the right to health, work, housing and education, as well as promote social care and security. However, these are rules about objectives, which do not in themselves grant citizens any rights.
¹⁰⁴ See discussion in Beskow (2009) and Skogh (2009).

far as possible. This will reduce the risk that the crisis may develop into a prolonged and deep recession. It is difficult to determine at this time whether the measures adopted to date are sufficient. The measures have generally been effective and, having regard to the circumstances, rapidly implemented. However, some measures have taken a relatively long time to prepare and approve or implement. There is probably a public finance scope for further emergency measures as well as a more traditional stabilisation policy once the economy is no longer hampered by coronavirus-related restrictions. However, we do not believe that active fiscal policy can fully neutralise the consequences of the pandemic. It is crucial that the measures implemented are socio-economically effective.

We recommend that the Government set up an inquiry to propose effective, quick and administratively simple measures with little risk of abuse that can be activated in the event of a drastic fall in activity in parts or all of the economy. The same inquiry should also clarify the Government's financial responsibility for the consequences of extraordinary events such as a pandemic.

4 Long-term sustainable public finances

The Council's long-term analysis of public finances is based on NIER's analysis in its annual special study on the sustainability of public finances (Section 4.1) and on the Government's assessment of the sustainability of fiscal policy in VP20 (Section 4.2). ¹⁰⁵ For this year's report, we have commissioned NIER to calculate three scenarios in addition to those presented by NIER (Section 4.5). ¹⁰⁶ The scenarios aim to highlight the consequences of developments that put more pressure on public finances than assumed in NIER's special study.

In the calculations of the long-term sustainability of public finances, NIER used its forecast to 2024 published in The Swedish Economy, December 2019, i.e. before the outbreak of the coronavirus pandemic, and then made a mode extrapolation.

Among other things, the pandemic will result in a higher Maastricht debt this year and probably until 2024. It may also affect the assumptions for other variables. At the same time, we expect that the pandemic will change the levels in both the baseline scenario and the other scenarios in this chapter in much the same way. Our focus is therefore on the differences between different scenarios, rather than the levels themselves. These differences identify the demands placed on public finances when developments are worse than in NIER's baseline scenario in various respects.

4.1 NIER's assessment February 2020

In order to make a projection of economic development starting in 2024, NIER needs to make a number of different assumptions. NIER assumes that older adults are healthier than previously, reducing the need for welfare services at a given age. Healthier older adults are also expected to change their behaviour in the labor market in such a way that 65-year-olds are eventually assumed to behave like

¹⁰⁵ NIER (2020c).

¹⁰⁶ See Sigonius (2020) for the estimates of the long-term sustainability of public finances made by NIER on behalf of the Council.

today's 60-year-olds. Furthermore, it is assumed that the retirement age will be raised as life expectancy increases.

GDP growth is determined by the supply side of the economy, i.e. by the change in the number of hours worked and productivity in the different sectors. Public sector revenue depends on taxes and charges. The calculations assume that the 2020 BP20 tax rules will remain in force. At the same time, public consumption is developing on the assumption of a sustained welfare commitment. In NIER's calculations, this takes the form of unchanged staff density in the public sector and an annual standard increase in line with the historical trend. ¹⁰⁷ In addition, the remuneration levels in the transfer systems are assumed to follow wage developments.

Households' savings ratio decreases as the population ages and consumes saved funds. Nominal interest rates are expected to rise from today's low levels to reach 4.2 percent by 2050.

Finally, it is important to point out that the limitations imposed by the fiscal framework are not taken into account in the projections. This means that the difference between projections and limits on debt and savings in the fiscal framework gives an idea of the challenges facing public finances in the coming decades.

Based on these assumptions, NIER projected the development until 2050. Overall, in its baseline scenario, NIER considered that public finances were not sustainable in the long term. 108 In its assessment, NIER took into account both the development and level of net government wealth and the Maastricht debt. An indication of long-term sustainability is that net wealth (and gross debt) are stabilising in the long term. However, it is also important that debt not only stabilises, but that it is stabilised at a level consistent with the public sector being able to fulfil its commitments. The Council shares NIER's view on what can be considered long-term sustainability of public finances, but believes that the level of Maastricht debt should not exceed 60 percent of GDP, which is the limit set by the EU. The market interest rates paid by the Government tend to rise as debt grows; a highly indebted state must pay a higher risk premium than a country with little debt. Interest costs that were not a problem can increase very fast if the financial

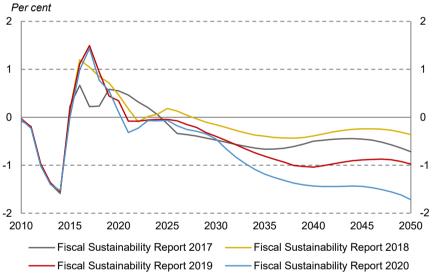
 $^{^{107}}$ The standard increase is estimated to be about 0.5 per cent per year. See NIER (2020c), Annex 4 for a detailed description.

¹⁰⁸ The Council's scenarios section consistently compares these with NIER's baseline scenario.

markets lose confidence in the policy being pursued. A vicious spiral with a growing deficit, increased debt, higher interest costs and ever-increasing consolidation needs can quickly set in.

In NIER's baseline scenario, demographic developments, with an increasing dependency ratio, mean that public savings will be negative by 2050. This in turn leads to a decline in net government wealth and a trend increase in consolidated gross debt (Maastricht debt). Compared to last year's report, the trend is slightly worse and compared to the assessments of recent years, the overall feature is that developments are increasingly worrying (Figure 4.1). 109

Figure 4.1 Net lending in NIER's Fiscal Sustainability reports 2017–2020



Source: NIER, Sustainability report 2020 for the public finances, Annex 1.

However, according to NIER, the sustainability of public finances was within reach. According to NIER's assessment, sustained tax increases or expenditure reductions equivalent to 0.6 percent of GDP (SEK 30 billion in today's monetary value) are needed to maintain the public welfare commitment and achieve sustainable public finances. At the same time, NIER concluded that public finances were sustainable if the surplus target is maintained until the next review and lowered in 2027 to a balance target.

¹⁰⁹ See NIER (2020c), Annex 1 for a comparison with previous assessments.

In this year's report, NIER specifically analysed the challenges facing the municipal sector. As the group of older adults makes up an increasing proportion of the population, demand for welfare services is increasing. NIER estimates that to meet the staffing needs the proportion of employed persons in the municipal sector needs to increase by over 1 percentage point to about 24.5 percent of all employed persons. Net recruitment needs correspond to 220,000 persons by 2050, which represents about one third of the total employment growth in the economy. The Government makes a similar assessment in VP20 and estimates that an additional 200,000 staff will be needed by 2035.

Finally, NIER also calculated the so-called S2 indicator. ¹¹¹ In the baseline scenario, it amounts to 0.14 until 2100. This means that public finances need to be strengthened by 0.14 percent of GDP to stabilise net financial wealth in the long term. According to the S2 indicator, public finances are then largely sustainable in the long term. However, the S2 indicator is difficult to interpret. On the one hand, the indicator does not say anything about the level at which net worth is stabilising and, as NIER shows, the calculations depend on the final year used – with a time horizon of 2060 instead of 2100, a strengthening of net lending by 1.4 percent of GDP, i.e. ten times as much, is required.

4.2 The Government's assessment in VP20

When the Government presented VP20, the coronavirus crisis was a fact. However, the Government's long-term projections start in 2023, when the consequences of the pandemic are essentially thought to have ebbed out. This means that the GDP level was expected to recover to about the same level as in the Government's January 2020 forecast, and that unemployment has fallen back. The Maastricht debt was projected to temporarily rise to just under 40 percent of GDP during the crisis, but to fall back quickly to 32.4 percent of GDP by 2023, i.e. lower than in 2019.

¹¹⁰ NIER (2020c), p. 49.

¹¹¹ The S2 indicator indicates the direct adjustment of primary savings needed to stabilise the net financial position at some point in the future. The indicator can be derived from the intertemporal budget restriction. A positive value indicates that the public sector needs austerity measures, while a negative value indicates that there is room for spending increases and or tax cuts.

Both the Government and the NIER assume unchanged staff density in the welfare sector and similar levels of payment in the benefits systems. However, while NIER assumes a progressive raising of standards in public-sector operations based on a supposed productivity increase being maintained, the Government assumes that the standard per user will remain unchanged.

Assuming unchanged or rising standards in the welfare sector is crucial for the long-term development of public finances. With NIER's assumption of a standard increase in line with the historical pattern, public consumption remains constant as a share of GDP, while the Government's assumption of unchanged standards means that public consumption as a share of GDP slows down over time.

Another difference compared to NIER's calculations is that the Government does not assume that older adults will become healthier and thus consume less welfare services at a given age. The amount of welfare services at a given age thus becomes slightly higher with the Government's assumption, resulting in higher public consumption relative to NIER's assumption. However, this effect is significantly smaller than the public financial impact of the assumption of rising standards.

Percentage of GDP Percentage of GDP 45 40 2 35 30 25 20 -2 15 -3 10 5 -5 0 -6 2018 2022 2026 2030 2034 2038 2042 2046 - Consolidated Gross Debt (left axis) Primary financial savings (right axis) Financial savings (right axis)

Figure 4.2 Government sustainability calculation in VP20

Source: VP20.

With the above conditions, fiscal policy is, in the Government's opinion, sustainable in the long term. In 2023-2035, public

consumption as a share of GDP will increase to meet demographic changes with an increasing proportion of older adults in the population. After 2035, however, primary expenditure as a percentage of GDP declines, mainly as a result of weaker development of public consumption and public investment. As a result, primary net lending is gradually strengthened. Maastricht debt falls and is projected to reach 10 percent of GDP by 2050 (Figure 4.2).

The Government also calculates the S2 indicator. With the Government's definition of an unchanged fiscal policy in the long term, the indicator amounts to -1.2. The implication is that primary net lending can be permanently weakened by 1.2 percent of GDP while net worth stabilises in the very long term.

The Government and NIER thus reach different conclusions about the development of public finances in the long term. This is explained by the difference in assumptions made in the projections. The fact that the Government does not adopt a standard increase in the welfare sector leads to a fall in expenditure as a percentage of GDP over time. The Council believes that the adoption of unchanged standards may result in too bright an outlook of public finances in the long term. The assumption of a certain standard increase is more realistic and thus gives a clearer picture of the demands placed on public finances in the future and the need to adapt fiscal policy.

4.3 The role of the framework

Sweden has a fiscal framework with broad political support. As a member of the EU, Sweden is also bound by the rules that apply to the Union. At EU level, budget deficits and debt are regulated above all by the Growth and Stability Pact. The Pact includes a preventive and a corrective part. The central part of the preventive part is the medium-term budgetary objective (MTO). The corrective part aims to address deficits greater than 3 percent and debt ratios higher than 60 percent of GDP.

¹¹² See footnote 111 for a description of the S2 indicator.

¹¹³ See Calmfors (2020).

¹¹⁴ For Sweden, the medium-term budgetary objective for structural net lending (MTO) is set at -1 percent of potential GDP.

Sweden's national fiscal framework is fundamentally stricter than that of the EU. The surplus target for net lending is 1/3 percent of GDP over a business cycle. However, the long-term sustainability of public finances and the scope for stabilisation policy are linked to debt and wealth levels, rather than to net lending. The fiscal framework was complemented in 2019 by a debt anchor, bringing the public sector's consolidated gross debt over the medium term to 35 percent of GDP, i.e. there should be a significant margin to the limit set at EU level. 115

A key assumption in NIER's and the Government's calculations and in the scenarios developed by the Council is that they ignore both national and international frameworks. In the calculations, expenditure is driven by demographic needs, while incomes follow GDP developments. Instead, within the framework, expenditure and revenues are forced to be adjusted to the budgetary space deemed compatible with the framework. NIER's calculations show that public finances will develop sustainably if the surplus target is respected. The fact that the framework currently has broad political support suggests that there is little risk of unsustainable development of public finances. However, as the increased need for welfare services puts pressure on public spending, the framework will become increasingly important. Maintaining welfare commitments where the standard is also gradually raised will either require spending reductions in other areas or income increases to ensure long-term development is sustainable.

4.4 Discussion

According to NIER's calculations, if the staff density in the welfare sector is to be maintained, the number of employees in the municipal sector is required to increase by 220,000 by 2050, or just under 7,100 full-time employees per year. The Government makes a similar assessment in VP20 and estimates that an additional 200,000 staff will be needed by 2035.

Figure 4.3 shows the number of employed persons in the municipal sector since 1993, according to national accounts. Since

¹¹⁵ However, unlike the expenditure ceiling and the surplus target, the debt anchor is not an operational objective, but a benchmark, while the surplus target, together with the expenditure ceiling, are better suited as operational objectives in economic policy.

the turn of the millennium, the number of employed persons in the municipal sector has risen by nearly 145,000. On average, this corresponds to an increase of just over 7,500 people per year.

However, the labor force is unlikely to increase at the same rate in the coming decades as it has done in the past. The population is ageing and the dependency ratio is rising. This means it will be more difficult in the future to maintain the pace of employment growth. Nevertheless, the Council considers that employment development in the municipal sector in line with the needs outlined by the Government and NIER is possible. However, this may require relatively higher wage increases in municipalities and regions.

Thousands of persons Thousands of persons 1600 40 1400 30 1200 20 1000 10 800 600 -10 400 -20 200 -30 1990 2000 2010 2020 2030 2040 2050 Yearly change (right axis) Yearly change to meet predicted needs (right axis) Total number of employed persons (left axis) - - - Average yearly change 1993–2000, 2000–2019 (right axis)

Figure 4.3 Employed in the local government sector

Source: Statistics Sweden, National Accounts (NR).

Similarly, a sustained budget increase of 0.6 percent of GDP (equivalent to SEK 30 billion), which according to NIER would return the development to a sustainable trajectory, is considered fully possible. Normally, the automatic budget increase represents about 0.5 percent of GDP.¹¹⁷ The necessary budgetary increase thus corresponds roughly to the reforms of an average Budget Bill.

 ¹¹⁶ The labour force grew on average just over 1 per cent per year in 2010-2019. Over the next ten years,
 NIER estimates that the growth rate will be about half as high (NIER, 2019b).
 117 See also Chapter 2.

Overall, the Council's assessment is that the challenges according to NIER's baseline scenario are manageable. At the same time, the starting point means that more vigorous measures may be needed to maintain long-term sustainability of public finances, for example if unemployment is permanently higher or wage costs need to rise faster to meet recruitment needs in the welfare sector. Section 4.5 presents three sensitivity analyses where the challenges facing public finances are, for various reasons, greater.

The question is what impact the coronavirus crisis will have on the pre-crisis calculations. In NIER's forecast from early April, the economic downturn is expected to be severe but short-lived, followed by a rapid recovery. The Government makes a similar assessment in VP20. If such a relatively favourable scenario were to become a reality, the economy could return to a situation similar to that used in the sensitivity calculations in three to four years' time.

4.5 Sensitivity analysis

The Council has instructed NIER to calculate a number of scenarios where, compared to NIER's baseline scenario, the development of the economy is such that the pressure on public finances increases.¹¹⁸

The sensitivity analyses in this chapter were carried out prior to the coronavirus pandemic. As a result, the baseline scenario on which the analysis is based, i.e. NIER's forecast from December 2019, is outdated. At the same time, we expect that the financial consequences of the pandemic will fundamentally change both the baseline scenario and the other scenarios in this chapter in much the same way. An analysis of how the different scenarios differ compared to the baseline scenario remains relevant. The focus of the further analysis will therefore be on differences in the evolution of the scenarios compared to the baseline scenario, while levels of e.g. Maastricht debt must play a subordinate role. Below is first a general description of the scenarios the Council is examining, after which the results are presented in more detail.

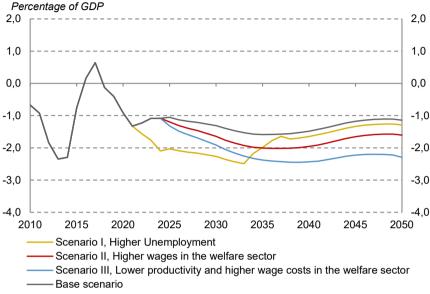
The first scenario (I) illustrates what may be required if the unemployment rate, for a variety of reasons, such as reduced matching efficiency, rises over a long period. The scenario highlights

¹¹⁸ In all scenarios, a comparison is made with the baseline scenario presented by NIER in the sustainability calculations for 2020 (NIER, 2020c).

the public finance consequences of a significantly poorer development in the labor market, with an unemployment rate 2 percentage points higher than in the baseline scenario for ten years, which currently equates to approximately 110,000 more unemployed. In light of the coronavirus crisis, the scenario may give an indication of what it would mean if the economic cycle becomes more protracted and unemployment higher over a longer period as a result of weak groups having difficulty getting into jobs and the matching efficiency in the labor market is permanently reduced.

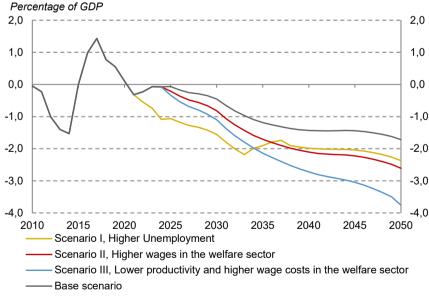
¹¹⁹ Last year, the number of unemployed persons was 377,000 (aged 15-74) on average according to Statistics Sweden, labour force surveys (LFS).

Figure 4.4 Primary saving



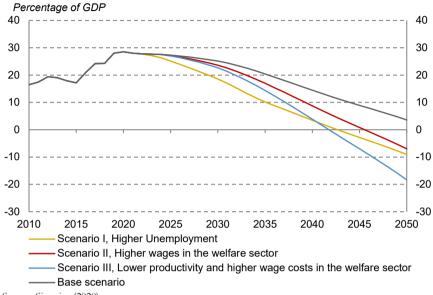
Source: Sigonius (2020).

Figure 4.5 Fiscal net lending



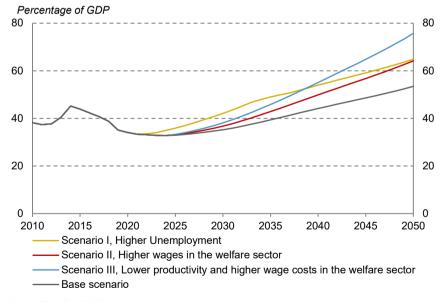
Source: Sigonius (2020).

Figure 4.6 Net worth



Source: Sigonius (2020).

Figure 4.7 Maastricht debt



Source: Sigonius (2020).

Scenario II focuses on the challenge of increasing the number of people in employment in the welfare sector. In this scenario, wages in the welfare sector are assumed to rise faster than in other sectors to meet the increased recruitment needs.

Finally, in scenario III, wage costs in the welfare sector are assumed to develop in nominal terms as in scenario II, while productivity development in the economy as a whole is weaker. The scenario focuses on the impact on public finances and on the welfare of the country in GDP per capita terms.

The pervading result is that primary savings will be lower than in the baseline scenario. ¹²⁰ In the first two scenarios, the difference is a few tenths of a percent of GDP in 2050. In the last scenario, however, primary saving is significantly lower, just over 1 percentage point in 2050 (Figure 4.4). Lower savings results in rising Maastricht debt. The net worth of the public sector, i.e. financial assets less financial liabilities, deteriorates gradually. A lower net worth in turn leads to lower net capital, i.e. property income less capital expenditure. Net lending, which includes interest expenditure and property income, is thus lower, both because of lower primary savings and because of the lower net capital.

Figures 4.4-4.7 show the evolution in all scenarios and the results are described in more detail below. As a percentage of GDP, the public sector's net worth will be lower by 10 percentage points in 2050 in the first two scenarios and just over 20 percentage points lower in the last scenario (Figure 4.6). Gross public debt would be just over 10 percentage points higher in 2050 than in NIER's baseline scenario and would well exceed 60 percent of GDP in the first two scenarios and be even higher in the last scenario (Figure 4.7).

Scenario I: Higher unemployment

Despite a slight slowdown in the labor market in 2019, the prepandemic situation was good with a high employment rate both from

¹²⁰ If the economy encounters a temporary disruption that impairs primary savings, the result will be a lower net capital even after the disruption has disappeared. This means that net lending will be lower even after primary savings have returned to their original level. If the economy encounters a disruption that permanently weakens primary savings, the result will be a systematic deterioration of net capital. The reason for this is that the development of primary savings each year is poorer than it would have been in the absence of the disruption. At the same time, net capital is deteriorating in an "interest-on-interest" effect. As a result, the difference between net lending in the permanent shock scenario and a scenario without a disruption is more negative than the difference in primary savings (Sigonius, 2020).

an international and historical perspective. However, as the Council noted in several previous reports, there are major differences between different groups. Unemployment among foreign-born people remains high, averaging 15 percent in 2019. Among non-European-born people, unemployment was even higher. Education is crucial for the probability of getting a job, and those with the lowest qualifications have great difficulty in gaining a proper foothold in the labor market. For both Sweden- and foreign-born people, persons with only a pre-upper-secondary education have a much greater risk of unemployment.

The weak outcomes for certain groups is partly explained by the features that characterize the Swedish labor market, including, among other things, relatively high demands on education and low incidence of jobs for those with low qualifications. These characteristics result in a risk that the labor market outcomes adopted in the baseline scenario may be too optimistic – especially for the group of non-European immigrants. The low human capital characterising many in this group who have immigrated in recent years, and who are expected to immigrate in the future, means there is a not negligible likelihood that unemployment will be higher than it is in the baseline scenario.

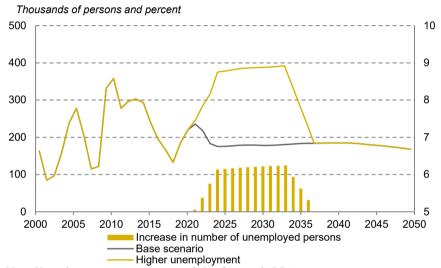
In a situation where the recession is deepening, or as currently – where there is an emergency in the economy – individuals who are not firmly established in the labor market are at the highest risk of losing their jobs. They may also experience significant difficulties in finding new jobs quickly if the economic recovery is prolonged.

In the first scenario, unemployment is assumed to increase gradually from 2022 to be 2 percentage points higher than in the baseline scenario in 2024, while the labor force is assumed to remain unchanged. The increase in unemployment persists for ten years (Figure 4.8), after which unemployment gradually returns to the same level as in NIER's baseline scenario, and from 2037 the rate of unemployment is the same. Compared to the baseline scenario, the number of unemployed increases by a maximum of 124,500 persons.

The average working time is assumed to remain unchanged. The increase in unemployment therefore has a direct impact on the number of hours worked to a corresponding degree. GDP development is weaker, resulting in lower tax revenues. At the same time, expenditure on unemployment benefits is increasing. Taxes and

social security contributions remain relatively unchanged as a share of GDP, as GDP is also lower. On the other hand, the lower level of GDP and higher expenditure means that the expenditure ratio (primary expenditure as a percentage of GDP) rises by just over 1 percentage point compared to NIER's base scenario while unemployment is elevated.

Figure 4.8 Unemployment, Scenario I



Note.: Unemployment rate as a percentage of labor force aged 15-74. Source: Sigonius (2020).

All in all, this leads to lower primary saving during the period when unemployment is elevated (Figure 4.4). The net worth of the public sector deteriorates gradually, resulting in a permanently lower net capital income (Figure 4.6). When unemployment returns to the level of the baseline scenario, primary net lending in the public sector will also be similar to that in the baseline scenario. However, net lending, which includes net capital, remains lower than in the baseline scenario (Figure 4.5). ¹²¹

In the baseline scenario, Maastricht debt rises to 53.5 percent of GDP by 2050. This trend is accentuated in the scenario with higher unemployment. Compared to the baseline scenario, the debt is just over 11 percentage points higher (Figure 4.7). The debt does not show any signs of stabilising.

¹²¹ In 2050, net lending is 0.7 percentage points lower than the baseline scenario.

Scenario II: Higher wages in the welfare sector

The challenges for the municipal sector are considerable in the coming decades. In order to maintain the welfare commitment, NIER estimates that the proportion of employed persons in the municipal sector needs to rise by 1 percentage point, from today's 23.5 percent. This equates to 220,000 persons by 2050.

In order to meet the need for recruitment, it is likely that wages need to rise faster in the municipal sector than in other sectors. 122 The scenario therefore assumes that those working in the welfare sector receive higher wage increases than in business. Wages are expected to increase 0.3 percentage points more than other salaries over a ten-year period from and including 2022 and by an additional 0.1 percentage point for a further ten years. Subsequently, all wages are expected to increase at the same rate. This does not therefore affect the volume of public consumption faced by the inhabitants, but only the cost at current prices and thus also GDP at current prices. The wages and salaries sum increases accordingly, and as households receive more disposable income, household consumption also increases slightly.

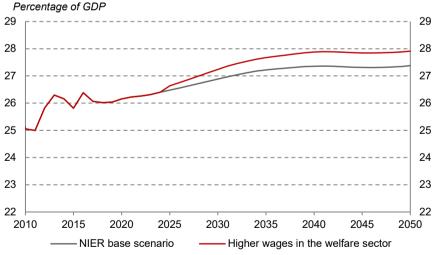


Figure 4.9 Public consumption 2010-2050, scenario II

Source: Sigonius (2020).

¹²² The average hourly earnings of employees in the public sector have risen slightly compared to those in the business sector in recent years. According to cyclical wage statistics, hourly earnings in the business sector grew by 2.5 per cent per year in 2018 and 2019. In the municipal sector, the corresponding growth rates were 2.7 per cent and 2.8 per cent respectively.

In the scenario of higher wage growth rates in the welfare sector, increased wage costs mean that public consumption will rise (Figure 4.9), which weakens primary savings. Primary income as a share of GDP is marginally affected compared to the baseline scenario as a result of slightly higher consumption and higher tax revenues. Overall, however, primary savings will be lower (Figure 4.4). As in the scenario of increased unemployment, this results in a poorer development of net worth as a share of GDP, which reduces the net capital. This contributes to lower net lending in this case than in the baseline scenario (Figure 4.5).

Maastricht debt rises by approximately as much as in scenario I. However, the increase is slower initially (Figure 4.7).

Scenario III: Lower productivity in the economy and higher wage costs in the welfare sector

In scenario III, we maintain the assumption of higher wages in the welfare sector in accordance with scenario II. In addition, we assume that productivity growth will be lower than in the baseline scenario.

In assessing future productivity growth, NIER has assumed historical productivity growth in 1980-2016. Following a correction to a change in composition (the service sector is increasing in relative size and industry is declining), NIER made the assessment last year that productivity growth will eventually rise to 1.6 percent per year. Since then, NIER has adjusted its view of productivity growth in business downwards, which corresponds to a decrease from 1.6 to 1.4 percent per year in the economy as a whole.

However, over the past 15 years actual productivity growth has been significantly lower than the historical average and the new estimate. Average annual productivity growth was 0.9 percent in 2005-2018 (Figure 4.10). Contributing effects to declining growth are considered to include that the number of hours worked has risen more than investments in capital (reduced capital deepening)¹²³ and a smaller contribution from total factor productivity (TFP).¹²⁴ The 1980 average, which is the starting point for NIER's assessment, covers many years of high productivity growth from investments in

¹²³ European Commission (2020b), p. 46.

¹²⁴ Total factor productivity is an overall measure of how efficiently different production factors are used, i.e. the part of productivity growth that is not explained by more and better capital or by increased quality of the labour force.

and implementation of IT and telecom. In the absence of reforms that contribute to increased productivity growth, there is a risk that the weaker development risk may continuing. The current coronavirus crisis may also delay and reduce business investment, which could contribute to lower productivity growth in the future.

Percentage change 5 4 3 2 2 1 O -1 -2 -3 1993 1996 1999 2002 2005 2008 2011 2014 2017 Productivity growth - - - - Average 1993–2004 - - - - Average 2005–2019

Figure 4.10 Productivity growth, 1993-2019

Note: Fixed prices, calendar adjusted values, basic prices, entire economy. Source: Statistics Sweden, NIER and our own calculations.

In scenario III, productivity growth is assumed to be lower than in the baseline scenario and to rise slowly to 1.2 percent per year. ¹²⁵ In addition, the total wage costs in the welfare sector are assumed to be the same as in scenario II. ¹²⁶ This means that public consumption as a percentage of GDP rises more than in the scenario of just higher wages. Higher expenditure, in turn, results in a doubled weakening of primary savings (Figure 4.4). Net worth deteriorates further to -18 percent of GDP in 2050 (Figure 4.6). At the same time, Maastricht debt is rising by more than 20 percentage points compared to the baseline scenario (Figure 4.7).

An important difference in relation to the previous two scenarios is that welfare deteriorates sharply. Relative to the baseline scenario,

¹²⁵ Compared to NIER's baseline scenario, productivity growth is 0.2 percentage points lower per year. In order to keep the ratio between growth and interest rates constant, long-term interest rates are also adjusted downward accordingly.

¹²⁶ Lower productivity growth is reflected in lower hourly wages in the business sector. This means that relative wage growth in the welfare sector will be higher than in scenario II.

GDP per capita is 5 percent lower at the end of the period (Figure 4.11). Lower productivity growth means that household consumption is 4 percent lower and public consumption is about 1.5 percent lower in 2050 (Figure 4.12).

Figure 4.11 GDP per capita relative to baseline scenario, scenario III

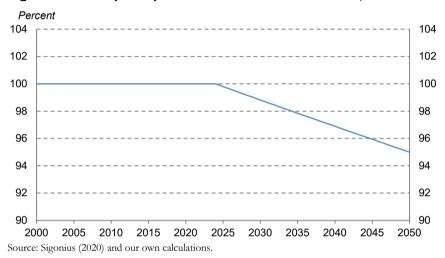
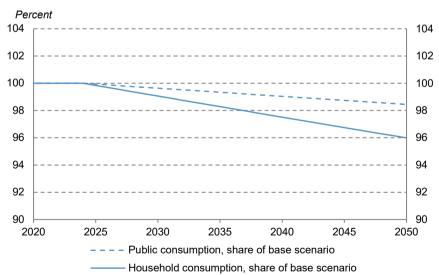


Figure 4.12 Household consumption and public consumption relative to baseline scenario, scenario III



Source: Sigonius (2020) and our own calculations.

4.6 The need for budget reinforcement in the scenarios

As shown in Figures 4.4-4.7, savings and net worth deteriorate markedly in all three scenarios, while Maastricht debt exceeds 60 percent of GDP in 2050.

In this section, we show with rough calculations what would be required in terms of budget strengthening to counteract the deterioration of public finances in the scenarios. We ask two questions: What is required to achieve average net lending at the surplus target level over the next 30 years? What budget strengthening is needed to keep the Maastricht debt at the level of the debt anchor (35 percent of GDP) and below the EU level of 60 percent of GDP?

Table 4.1 Estimated budget increase, percent of GDP

| | Scenario I | Scenario II | Scenario III |
|----------------------------------------|------------|-------------|--------------|
| Average net lending of 1/3 percent | 2.00 | 1.75 | 2.25 |
| Maastricht debt stabilises around 35 | 1.00 | 0.90 | 1.35 |
| percent by 2050 | | | |
| Maastricht debt max 60 percent by 2050 | 0.20 | 0.15 | 0.50 |

Note: Average net lending of 1/3 percent of GDP relates to 2020-2050.

Source: NIER and our own calculations.

As shown in Table 4.1, primary savings needs to be strengthened in the order of 2 percent of GDP to achieve the surplus target in the sense that net lending is 1/3 percent on average over the next 30 years. However, with savings equivalent to 1/3 percent of GDP for 30 years, the Maastricht debt would fall to a very low level.

Stabilising debt at the level of the debt anchor requires about half as large a budget increase. However, the permanent strengthening needed to keep the Maastricht debt below the EU's 60 percent threshold is small, around 0.2-0.5 percent of GDP.

4.7 Assessments and recommendations

Demographic developments will put pressure on public finances in the coming decades. The surplus target is justified by, among others, precisely this. Even before the coronavirus pandemic, NIER's

¹²⁷ The surplus target is defined over a business cycle, but over 30 years the effects of cyclical fluctuations should disappear. Furthermore, the level of the surplus target is reviewed and may change every eight years.

calculations showed that public finances were not sustainable in the long term, even though a modest reinforcement would make them sustainable.

However, the Council's sensitivity calculations in this chapter indicate that sustainability deteriorates significantly with reasonable assumptions of slightly higher unemployment levels or higher relative wages in the welfare sector. All scenarios lead to Maastricht debt exceeding 60 percent of GDP by 2050 and neither net worth nor debt stabilising over time.

In its sustainability calculations, the Government assumes that there will be no rise in standards in the public sector. This is an unrealistic assumption and may paint an overly bright picture of the long-term sustainability of public finances. The Council considers that an assumption of a certain standard increase is more reasonable and better captures future challenges for public finances and the need to adapt fiscal policies.

Sustainability projections generally ignore the constraints imposed by the fiscal framework on fiscal policy. If the surplus target is met, public finances will remain sustainable, but maintaining the welfare commitment at the same time requires either spending reductions in other areas or revenue increases.

5 Forecast evaluation

In this chapter, we evaluate some of the Government's projections. This evaluation is part of the Council's assignment. The Council focuses the forecast evaluation on the Government's projections for public finances as they constitute important constraints on the formulation of economic policies in general and fiscal policy in particular. The Council has previously assessed the Government's forecasts for key macroeconomic variables such as GDP growth and unemployment, most recently in the 2017 Council report.

5.1 Background

Several authorities are tasked with evaluating the Government's forecasts by examining the difference between forecast and outcome and by comparing the forecasts with those made by other forecasters. The authorities that regularly publish forecast evaluations that include Government forecasts are NIER, ESV and the Riksbank. The Government also publishes regular evaluations of its own forecasts.

In its evaluation, the Council noted that the Government had tended to overestimate GDP growth and underestimate unemployment to a greater extent than NIER for the period 2007-2016. Looking back, the Government's forecasts for GDP growth, unemployment, and fiscal and structural net lending have been less accurate than the NIER's forecasts in the period. The Council considered that the Government should be able to make more accurate forecasts, especially for the variables of public savings where the Government can be expected to have access to the most up-to-date information. Furthermore, the Council considered that the Government should explain more clearly the assumptions made in the forecasting process.

The analysis is followed up in this year's report by including the two years that have accrued since the previous evaluation (Section 5.3). In addition, other recent evaluations of the Government's forecasts (Section 5.2) are presented. We also discuss forecast revisions in connection with the Government's budgeting work (Section 5.4) and finally the problems that arise when the outcome for net lending is regularly revised as new information is added (Section 5.5).

5.2 Forecast evaluations by the Government, NIER and others

The Government's evaluation of its own forecasts is presented in two ways, both annually in the Spring Bill and in a recurring memorandum. The evaluation carried out in the Spring Bill relates to the forecasts for GDP growth, inflation and unemployment. On the other hand, no evaluations of forecasts for net lending are carried out. The Government shows how its own forecasts for the next few years relate to other analysts' forecasts. In addition, the Government's forecasts over the past 15 years are also compared with the projections of other institutions. A more detailed evaluation is carried out in a recurring memorandum, but not every year. ¹²⁸

In VP20, the Government finds that its forecasts have underestimated GDP growth in the following year over the evaluation period (1994-2019) by an average of 0.29 percentage points. For forecasts for the current year, the Government has instead overestimated GDP growth, but the evaluation does not indicate that the Government's deviations are systematic. In relation to unemployment as well, the Government has not made systematic forecasting errors, but on average unemployment has been underestimated for both the current and the next year. However, the Government has made systematic errors in the forecasts for inflation, which are overestimated for both the current and the next year.

The most recent evaluation memorandum was published in 2018 and analyses forecasts of GDP growth, unemployment and inflation for the years 1994-2017. The Government's forecasts are compared in the memorandum with that of other forecasters, partly for standard errors and partly by ranking the different forecasts according to forecast accuracy. The 2018 evaluation, like VP20, does not indicate any systematic errors in the Government's forecasts for GDP growth or unemployment, but, like other forecasters, the Government systematically overestimated inflation. The standard errors for GDP growth and unemployment show the same direction as reported in VP20. The Government's forecast accuracy for GDP growth for the current year was high in a ranking of forecasters, while the forecast for the next year was further down. For both

 $^{^{128}}$ IN recent years, the memorandum has been published in 2014, 2015, 2016 and 2018. 129 Ministry of Finance (2018).

horizons, the Government's accuracy is lower than NIER's. The Government also scored highly in a ranking of forecasts for unemployment. However, the differences between forecasters were relatively small and should therefore be interpreted cautiously.

NIER is tasked with evaluating the Government's forecast accuracy, which it has done annually since 2005. The latest evaluation was published in April 2020. ¹³⁰ It examines forecasts for the current and the next year for two periods, 2019 and 2015-2019, and refers to forecasts for unemployment, GDP growth, inflation, repo rate and net lending, among others.

The Government's forecast accuracy for forecasts for 2019 was low compared to other forecasters for all variables in the comparison, except for forecasts for employment growth and inflation.¹³¹ The Government had the lowest forecasting accuracy for net lending forecasts and was among the three forecasters with the lowest accuracy in forecasts of GDP growth and unemployment. In relation to forecasts for the whole period 2015-2019, the Government had a relatively low accuracy in forecasts for the current year for GDP growth and inflation. For the other variables studied, the Government's precision was close to the average for forecasters.

For forecasts for the following year, the Government's forecast accuracy was lower than the average for the other forecasters for all variables except for forecasts of the inflation rate. The Government's forecasts for employment growth and unemployment had a higher accuracy than NIER's forecasts.

The averages of all analysts' forecasts for 2015-2019 show that next year's GDP growth and net lending were underestimated, while the rate of wage growth and the repo rate were on average overestimated. Inflation was underestimated on average by forecasters for the current year but was overestimated for the following year. However, with the exception of net lending, average errors were relatively small. The Government underestimated net lending for the current year by 0.42 percent of GDP on average in forecasts for the years 2015-2019. The Government's underestimation for the following year was less than that of other forecasters

¹³⁰ NIER (2020d).

¹³¹ The forecasting institutes included in the analysis are the Swedish National Financial Management Authority, the Swedish Trade Research Institute, the NIER, the Swedish Trade Union Confederation, Nordea, the Government, the Riksbank, SEB, Handelsbanken, the Confederation of Swedish Enterprise and Swedbank.

over the period, 0.60 percent of GDP compared to 0.82 percent of GDP. 132

Each year, the Riksbank publishes a forecast evaluation including the Government's forecasts. The Riksbank does not make any express assessment of the Government's forecasting errors, and the evaluation focuses on forecasts for inflation. The difference between the results of different forecasters' evaluations is generally small and the analysis does not indicate any conclusions about the Government's forecasts other than those noted by NIER.

ESV also presents an annual forecast evaluation. The most recent was published in May 2019 and compares its own forecasts with those of the Government and other forecasters. The evaluation includes forecasts published from autumn 2016 to autumn 2018. In order to get the fairest possible picture, ESV compares the Government's calculations in budget and spring budgets with ESV's own forecasts, which are published as close to the bills as possible. Like the Government, ESV makes forecasts for individual parts of the state budget, such as the central government's revenue and expenditure. On the other hand, unlike the other forecast evaluations, no comparison of forecast accuracy is made, but, for example, reasons for changes in forecasts for specific spending areas are discussed.

ESV notes, for example, that both the Government and ESV underestimated tax revenues for 2018 and underestimated the caprestricted spending after 2016 and then overestimated it in autumn 2018. Overall, the ESV's review shows that the ESV's and the Government projections differ, but the differences are not significant or systematic.

Overall, the review of forecast evaluations published over the past year shows that the Government generally does not make greater forecasting errors than other analysts, which is in line with the Government's own evaluation in VP20. However, the Government only evaluates forecasts for GDP growth, unemployment and inflation. The Government does not examine standard errors or forecast accuracy of its own public finance projections in its more detailed forecast evaluation memorandum.

¹³² The fact that the Government underestimates net lending in its forecasts is true even further back in time. Net lending was underestimated on average by SEK 20 billion in 1998-2007, or by 0.8 per cent as a share of GDP at current prices (NIER, 2009).

¹³³ Sveriges Riksbank (2020c).

5.3 The Council's forecast evaluation

The Council has carried out an evaluation of a sample of Government forecasts published between 2007 and 2019 with a focus on forecasts for net lending and structural net lending. ¹³⁴ The review is essentially an update of the evaluation in the 2017 report. The Government's forecasts are evaluated against four horizons: current year, next year and the two following years.

In the next section, we analyse the forecast accuracy, i.e. how close the forecasts are to the outcome, regardless of whether it is overestimated or underestimated. In the following section, we analyse whether the errors in the forecasts are systematic, i.e. whether the outcome tends to be over- or underestimated.

5.3.1 Forecasting precision

The measures we use to evaluate forecast accuracy are the mean absolute error (MAE) and the root mean square error (RMSE). ¹³⁵ Both measures describe how close the Government's and NIER's forecasts have been to the outcome during the period. The measures do not measure the direction of the deviation (over- or underestimation). The reason we use both MAE and RMSE is that RMSE gives greater weight to large deviations while MAE treats forecast deviations on a straight-line basis. Both measures give a similar picture in the forecast evaluation, which means that the Government's and NIER's forecasting errors do not differ significantly in size.

The Government's and the NIER's forecasting accuracy are shown in Table 5.1. Forecasting errors tend to increase with the time horizon, which is expected because it is more difficult to forecast with a longer time horizon. The Government's forecasting error is

¹³⁴ The period includes the financial crisis of 2007-2008, which led to major forecasting errors. The Council's 2017 forecast evaluation reported forecast accuracy and standard errors starting in both 2007 and 2010. The size of the forecast errors changes if the financial crisis is excluded, but the ratio between the Government and NIER did not change, either for forecast accuracy or standard errors. (Fiscal Policy Council, 2017, Annex 2.).

¹³⁵ Forecast error, e_t , is defined as the forecast minus the outcome. Mean Absolute Error: $MAE = \frac{1}{n}\sum_{t=1}^{n}|e_t|$. Root Mean Square Error: $RMSE = \sqrt{\frac{1}{n}\sum_{t=1}^{n}e_t^2}$. The root mean square error is approximately equal to the standard deviation if the standard error is approximately zero.

generally greater than NIER's. ¹³⁶ The difference tends to be greater the later the point in time to which the forecast relates.

Table 5.1 Mean absolute error and root mean squared error for forecasts produced 2007-2019

| | GDP g | rowth ¹ | Unempl | loyment 2 | Fin. net le | ending ³ | | uct. net ending ⁴ |
|--------------------------------|---------------------------|--------------------|--------|-----------|-------------|---------------------|------|---------------------------------|
| | Reg. | NIER | Reg. | NIER | Reg. | NIER | Reg. | NIER |
| Mean a | Mean absolute error (MAE) | | | | | | | |
| t | 0.81 | 0.63 | 0.23 | 0.18 | 0.60 | 0.49 | 0.58 | 0.46 |
| t+1 | 1.99 | 1.63 | 0.85 | 0.71 | 1.27 | 1.15 | 0.92 | 0.85 |
| t+2 | 1.86 | 1.70 | 1.35 | 1.00 | 1.91 | 1.61 | 1.06 | 0.87 |
| t+3 | 1.30 | 1.22 | 1.47 | 0.94 | 2.04 | 1.43 | 1.53 | 0.91 |
| Root mean squared error (RMSE) | | | | | | | | |
| t | 1.06 | 0.94 | 0.30 | 0.26 | 0.81 | 0.69 | 0.70 | 0.59 |
| t+1 | 2.78 | 2.53 | 1.22 | 1.06 | 1.60 | 1.52 | 1.11 | 1.02 |
| t+2 | 2.61 | 2.70 | 1.87 | 1.54 | 2.26 | 2.00 | 1.33 | 1.19 |
| t+3 | 1.68 | 1.60 | 1.77 | 1.33 | 2.60 | 1.71 | 2.01 | 1.34 |

¹At market price. ²Government: Open unemployment 16–64 in spring 2007, followed by unemployment 16–64 according to the ILO definition to and including autumn 2008, followed by unemployment 15–74 according to the EU definition. NIER: Open unemployment 16–64 from and including March 2007 to and including June 2007, followed by unemployment 16–64 according to the ILO definition to and including March 2011, followed by unemployment 15–74 according to the EU definition. ³Percentage of GDP. ⁴Percentage of potential GDP.

Note: The forecasts are evaluated against the first published outcomes each year, usually available in March of the following year. These outcomes may subsequently be revised. The forecast published by NIER in January 2008 has been treated as a 2007 forecast due to the early arithmetic deadline (11 January 2008). The number of observations on which each value in the table is based varies between horizons, institutions and forecast variables.

Source: NIER and our own calculations.

Like in the 2017 Council's evaluation, the Government's accuracy is generally worse than NIER's for GDP growth and unemployment forecasts. The Government has greater forecasting errors for both GDP growth and unemployment than NIER for almost all time

horizons.

The evaluation of net lending is carried out in the same way as for the other variables, but for structural net lending there are no outcomes. It is therefore not possible to carry out a forecast evaluation in the normal sense. Instead, the forecasts for structural net lending are evaluated against the assessment made by the respective forecasters themselves in connection with the publication of the first national accounts outcome for the current full year.

The forecast accuracy of net lending and structural net lending is low for both the Government and KI. 137 Structural net lending has a

¹³⁶ This is in line with the results of the Council's forecast evaluation 2017, see Swedish Fiscal Policy 2017, Chapter 3, Section 3.5.

relatively lower absolute error, but forecasts for the following year are revised on average by around 1 percent of GDP. Forecasts made in the current year also have a mean absolute error of around 0.5 percent of GDP. The Council believes that the Government should evaluate its own forecasts for net lending and better communicate the uncertainty that exists when they are presented in the context of fiscal bills.

5.3.2 Average deviations

Since the two measures used to measure forecast accuracy above do not distinguish between over- and underestimates in the forecasts, we need another measure to examine whether the forecasts tend to be over- or underestimates. For this we use standard error (SE). ¹³⁸ A negative standard error indicates that the forecast has underestimated the outcome to a greater extent and vice versa. The standard error is not used to measure forecast accuracy because deviations in different directions cancel each other. A forecaster whose forecasts substantially over- and underestimate the outcome to an equal extent, will have a low standard error but a low forecast accuracy.

Table 5.2 shows the standard errors for the Government's and NIER's forecasts. Both tend to overestimate GDP growth and underestimate unemployment in the longer term. The difference between the standard error for NIER and the Government is generally small when we compare forecasts of GDP growth and unemployment. However, the Government tends to underestimate unemployment to a greater extent than NIER in projections for two and three years into the future.

¹³⁷ The next section discusses why the Government's methodology gives rise to greater standard errors in net lending and structural net lending projections in periods t+2 and t+3.

¹³⁸Standard error is defined as: $MF = \frac{1}{n} \sum_{t=1}^{n} e_t$.

| | GDP g | GDP growth ¹ | | Unemployment ² | | Fin. net lending ³ | | Struct. net lending ⁴ | |
|-----|-------|-------------------------|-------|---------------------------|-------|-------------------------------|-------|----------------------------------|--|
| | Gov. | NIE R | Gov. | NIER | Gov. | NIER | Gov. | NIER | |
| t | 0.06 | 0.15 | 0.03 | 0.01 | -0.37 | -0.32 | -0.26 | -0.17 | |
| t+1 | 0.51 | 0.57 | -0.03 | 0.02 | -0.09 | -0.33 | -0.06 | -0.21 | |
| t+2 | 0.78 | 0.69 | -0.36 | -0.16 | 0.77 | 0.14 | 0.63 | 0.21 | |
| t+3 | 0.19 | 0.01 | -0.69 | -0.25 | 1.49 | 0.47 | 1.33 | 0.64 | |

Note: The standard error is the average forecasting error, defined as forecast minus outcome. For general government structural net lending, there are no outcomes, and therefore it is not possible to carry out a forecast evaluation in the normal sense of this variable. The forecasts for this variable are evaluated against the assessment made by NIER in the first forecast after the first outcome of the national accounts for the current full year is available. A positive difference means an over-estimate of the outcome on average, and vice versa. The variables are described in more detail in the note to Table 5.1.

Source: NIER and our own calculations.

The difference is greater if we compare the standard errors in net lending and structural net lending. Both forecasters underestimate net lending in the short term and overestimate it later in time. For the first two forecast horizons, the differences in standard errors are small, but over a two and three year horizon the Government overestimates net lending to a greater extent than NIER. However, this is due to differences in forecasting method.

The Government's calculations of net lending and structural net lending are based on an assumption of unchanged rules or unchanged policies. This assumption leads to a consistent overestimation of the strength of public finances over a few years ahead. In simple terms, tax revenue follows economic development, while large items of expenditure, such as government contributions to municipalities and many transfer expenses, are amended by political decisions. Therefore, if no new decisions are taken, expenditure will normally increase more slowly than revenue, giving rise to a so-called automatic budget increase, which is usually estimated at around 0.5 percent of GDP per year. The calculations are therefore not designed to provide as accurate a forecast as possible, but rather to assess the available scope for fiscal measures in the coming years given the existing regulatory system.

The calculations in the Budget Bill and the Spring Bill normally extend three years into the future, i.e. the year in which the budget is budgeted and the following two years. For the budgeted year, the calculations are based on the fact that the rules and measures proposed in the bill are also implemented. For the next two years, however, there is no draft budget and the calculations are based on

the fact that the rules are not changed. The balance-strengthening effect of the Government's calculation method therefore occurs in the second and third years.

It is therefore neither surprising nor remarkable that the Government's forecasts for the second and third years systematically show too low expenditure development levels and therefor also too high net lending and structural net lending levels. This average deviation is therefore not the result of poor forecasts, but a result of the method, which in turn aims to identify available scope for fiscal policy measures and not to make as accurate a forecast as possible. The average underestimation of expenditure is therefore not a problem in this context.

However, problems arise if the calculations were to be used as forecasts. It is patently incorrect to bring the strong development two and three years forward to revenue to meet the surplus target or because the debt anchor is declining to a certain level in three years' time. It cannot be argued both that there is room for fiscal policy measures in the case of unchanged rules that can be used for future measures, and at the same time claim that the surplus target is being achieved by not using the space. This objection was also an important part of the criticism of the follow-up to the surplus target repeatedly put forward by both the Council and the National Audit Office (RiR). The so-called 7-year indicator previously used by the Government for follow-up included years calculated based on unchanged rules, and structural net lending two and three years ahead was also used as part of the follow-up.

However, following the changes to the framework that entered into force in 2019, the second and third years have lost their importance in monitoring the surplus target. The follow-up is now mainly carried out using structural net lending for the current year and next year. The 7-year indicator has been abandoned and structural net lending for the second and third years are not used either. The systematic strengthening of public finances two and three years ahead resulting from the Government's calculation method is therefore no longer used in the follow-up but rather for the actual purpose of the calculations – to assess the future fiscal space. ¹⁴⁰

¹³⁹ For example, the National Audit Office (2011).

¹⁴⁰ The Council considers that an 8-year average, including the coming years, should nevertheless be taken into account in an overall assessment of the surplus target (see Section 2.2).

However, the report on the evolution of gross public debt is still based on calculations based on unchanged rules. The rapid decrease of gross debt in the Government's accounts is therefore misleading, and the debt would have developed less favourably if the calculation had instead been based on a forecast.

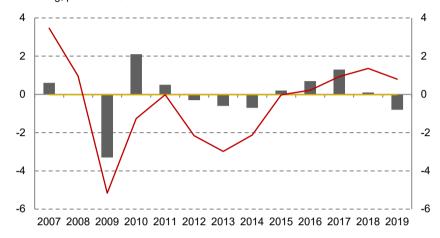
5.4 Forecast revisions for net lending

The survey of the standard errors in the section above does not show any major differences in forecasting errors between the Government's and NIER's public finance forecasts for the current or next year, but both tend to underestimate net lending in the short term. In this section, we look at how the public finance forecasts are revised.

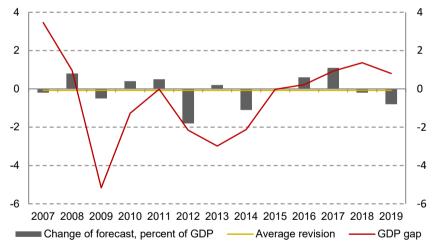
If the Government were to present too optimistic a forecast in the Budget Bill, which contains next year's economic policies, and then revise downwards the assessments for the same year in the later forecasts, the Government could have more room for spending increases or revenue reductions than the indicators allow. Conversely, a systematic underestimation of forecasts would leave less room for the Government to pursue budget-weakening economic policies.

Figure 5.1 Change in the Government's forecast between BP and estimate for the current year

Net lending, percent of GDP



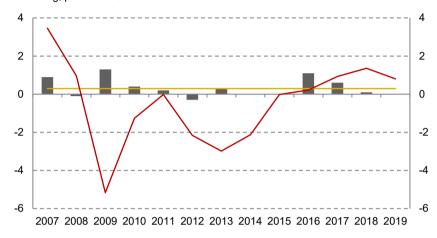
Structural net lending, percent of potential GDP



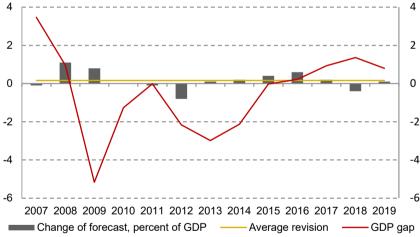
Source: BP for each year and own calculations. The average revision for net lending and structural net lending is -0.02 and -0.08 respectively for the period.

Figure 5.2 Change in NIER's forecast between April forecast and estimate for the current year

Net lending, percent of GDP



Structural net lending, percent of potential GDP



Note: NIER's forecasts in October and year for the current year and the reported outcome for savings in October of the following year. The average revision for financial and structural net lending is 0.29 and 0.16 and for the period respectively.

Source: NIER (2020).

To investigate whether the Government systematically over- or underestimates savings, we compare the BP forecast for the following year with the forecast in the subsequent BP for the same year (Figure 5.1). The chart does not therefore show forecasts for structural and net lending, but the difference between the forecast in

BP in the autumn before the start of the year and the forecast in BP published in the autumn of the current year. In the latter forecast, more data are available because it has been possible to observe what has happened in the economy during the year. The analysis does not suggest that the Government is systematically over- or underestimating the scope for the coming year. The standard errors during the period are small, for net lending the average is close to zero and for structural net lending it is an insignificant -0.08 percent of GDP for the period.

Instead, the picture that emerges from Figure 5.1 is that the Government underestimates the power of economic activity. It is not uncommon for forecasters to make worse forecasts just as the state of the economy changes. In Figure 5.1, the GDP gap indicates the state of the economy. A change in the GDP gap (such as the one between 2008 and 2009) shows a change in economic activity. The fact that the Government underestimates the power of economic activity means that when economic activity changes for the worse, it will have to revise the forecasts for net lending downwards, which now seem to be lower than the previous forecast indicated. By analogy, net lending tends to be revised upwards when economic activity is on the rise. A similar picture emerges when we analyse NIER's forecasts (Figure 5.2).

5.5 Forecast revisions for net lending

In addition to forecasting errors for structural and net lending, there is another uncertainty factor regarding the basis of fiscal policy, namely revisions to *outcomes* for net lending. ¹⁴¹ Table 5.3 shows when outcomes are available, along with BP and VP publication dates. The first outcome is presented by Statistics Sweden in February of the following year. The table shows how the first outcome for 2019 is presented at the beginning of 2020. The outcome is then revised on five occasions. The final annual estimate for 2019 is published by Statistics Sweden in August 2021.

¹⁴¹ In addition to the analysis carried out by the Council itself, this part of the chapter is based on the National Audit Office's report National Accounts – a more stable basis for fiscal policy, the National Audit Office (2019).

Table 5.3 Publication of national accounts and ordinary fiscal bills in 2020-2021

| Year | Month | National accounts | Fiscal Bills |
|------|-------|------------------------------------|--------------------------------|
| 2020 | Jan | | |
| | Feb | 1st preliminary estimate of 2019 | |
| | Mar | | |
| | Apr | | Spring Fiscal Policy Bill 2020 |
| | May | Revision 1 | |
| | Jun | | |
| | Jul | | |
| | Aug | | |
| | Sep | Revision 2 | The Budget Bill for 2021 |
| | Oct | | |
| | Nov | Revision 3 | |
| | Dec | | |
| 2021 | Jan | | |
| | Feb | Revision 4 | |
| | Mar | | |
| | Apr | | Spring Fiscal Policy Bill 2021 |
| | May | | |
| | Jun | | |
| | Jul | | |
| | Aug | Definitive annual estimate of 2019 | |
| | Sep | | |
| | Oct | | |
| | Nov | | The Budget Bill for 2022 |
| | Dec | | |

Source: National Audit Office (2019).

Revisions to the outcomes have historically been major. For example, net lending in 2015, 2016 and 2017 was stronger than the preliminary outcomes showed. Net lending was underestimated by SEK 15 billion per year on average for the three years. ¹⁴² This may have led the Government to conduct a less expansionary policy in relation to the objectives of net lending, while the Government could later conduct a more expansive policy.

Figure 5.3 shows the preliminary and definitive outcome of net lending between 2001 and 2016 as a percentage of GDP. The average for revisions over the period is -0.2 percent of GDP. Revisions can be divided into two categories, revisions due to changes in accounting and revisions excluding changes in accounting. The average for revisions due to changes in accounting over the period is

¹⁴² National Audit Office (2019).

¹⁴³ Changes in accounting means that Statistics Sweden has changed the way national accounts are structured. Many of the changes during the period have been called for by Eurostat and aim to harmonise economic statistics in the EU, National Audit Office (2019), p. 34.

-0.3 percent of GDP, while revisions excluding changes in accounting increased general government savings by 0.1 percent of GDP.¹⁴⁴

Percent of GDP 5 5 4 4 3 3 2 2 1 1 0 -1 -2 -2 -3 -3 2001 2003 2005 2007 2009 2011 2013 2015 Revision —— Definitive net lending — Preliminary net lending

Figure 5.3 Difference between preliminary and definitive net lending outcomes

Note: As shown in Table 5.3, the definitive annual calculation of national accounts is not published for 2017, the chart extends until 2016, the last year with definitive annual calculations. Source: National Audit Office (2019).

Figure 5.3 shows revisions to net lending, excluding revisions due to changes in accounting, as a percentage of the preliminary outcome. The average absolute revision for the period is 0.5 percent. The graph also illustrates one of the observations made by RiR in autumn 2019, namely that revisions to net lending, like the change in forecasts (Section 5.4), follow economic activity. The outcome tends to be revised upward in an economic upturn and downward into an economic downturn. RiR argued that there is a statistically reliable correlation between economic activity and the revisions to net lending.¹⁴⁵

¹⁴⁴ National Audit Office (2019).

¹⁴⁵ In April 2020, the Government presented its assessment of the National Audit Office's observations and recommendation to the Government in skr. 2019/20:134.

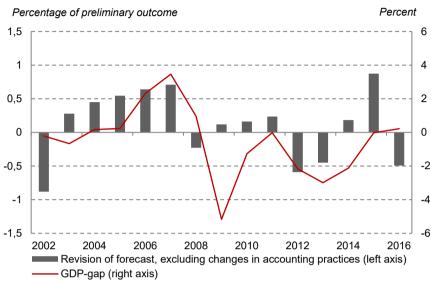


Figure 5.4 Revision of net lending excl. changes in accounting and GDP gap

Source: The National Audit Office (2019) and Sveriges Riksbank.

5.6 Assessments and recommendations

The review of forecast evaluations published in the past year shows overall that the Government does not make greater forecasting errors than other analysts in general. Compared to NIER, however, the Government's forecast accuracy is generally poorer.

As regards the forecasts for net lending and structural net lending for the following year, the forecasting errors are relatively large. In addition, there is a tendency to overestimate net lending in an economic upturn and underestimate it in an economic downturn. The Council believes that the Government should include its own public savings forecasts in its forecast evaluation.

Revisions to the net lending outcome are also relatively large. Since the surplus target is defined not only for the current year but over a longer period, the Government should give a better account of the uncertainty that remains in the outcomes.

Since 2019, the Government no longer uses projections with unchanged rules in the follow-up of net lending and structural net lending. However, this does not apply to the calculation of the development of gross public debt. The Council considers that the

rapid reduction in gross debt in Government calculations is misleading.

6 Technological development and the Swedish labor market

Structural change and changes in the composition of the labor market are a natural part of economic development. More recently, the possibilities for automation through the use of robots and, in particular, the use of artificial intelligence have been the focus of the debate on the future labor market. Increased use of industrial robots primarily affects the production of goods, while artificial intelligence creates opportunities to automate tasks in the service sector as well. One example is so-called machine learning, i.e. that computers can improve their own capacity to perform tasks, which is likely to continue to expand the scope for automating jobs. In this chapter, which is based on a dossier report on technological development and the Swedish labor market 146, we discuss how the labor market has changed in recent decades and what we can expect in the future.

6.1 Trends in the Swedish labor market 1985-2017

The favourable employment trend in Sweden refutes the statement that technological development as such leads to higher unemployment. There is no general indication in OECD countries in genera that technological developments would be followed by increased unemployment and a lower employment rate, however in the US there are signs that increased automation has had a negative impact on overall employment to some extent. On the other hand, the composition of employment in Sweden has changed significantly over time with a decline in the share of manufacturing by about 10 percentage points and an increase of the same magnitude in business-oriented services.

The employment rate in Sweden has been relatively stable since the mid-1980s, with the exception of the 50-64 age group, where employment has been rising. Among younger ages (16-30), the employment rate in 2017 was slightly lower than before the 1990s

¹⁴⁶ Georg Graetz, Technological Change and the Swedish Labor Market, January 2020.

crisis, which is probably explained by the increasing number of people participating in higher education rather than by technological developments.

Thanks to technological developments more types of tasks can be automated. However, tasks that require analysis, considerations and decisions are more difficult to automate. Tasks that involve, in whole or in part, contact between people are also less suitable for automation. Many seemingly simple and low-paid tasks, such as service jobs, can also be very difficult to automate. The jobs that are most easily carried out by machines and computers are tasks with significant elements of routine and repetition. This is not necessarily limited to production of goods, but may include, for example, administrative tasks and different types of managing tasks. Such work also does not necessarily coincide with a low level of knowledge content or low pay.

The fact that technological developments have affected employment composition is linked to the fact that the jobs best suited to continued automation are probably neither the highest nor the lowest paid jobs, but rather jobs closer to the middle, both in terms of education and wages. This phenomenon, namely that demand for jobs close to the middle both in terms of qualifications and wages has a weaker development than both high- and low-paid jobs is usually referred to as *job polarisation*. There are changes in the labor market, involving both shifts between sectors, such as a decline in industrial jobs and an increase in service jobs, and between different tasks, that are likely linked to technological developments. The latter, job polarization, is a pattern found in most developed countries including Sweden.

At the same time, Swedish development differs from other countries in other respects. There is strong support in research to suggest that technological developments have led to increased demand for highly skilled workers. In the United States and other countries, such as the United Kingdom and Germany, this has contributed to a sharp increase in the return on higher education. In Sweden, however, the education premium has not increased in the same way. The increased supply of skilled labor should have led to a decline in wages, but this has not happened, suggesting that demand for skilled people has increased at the same time.

Wage dispersion in Sweden is low in an international perspective¹⁴⁷ and it has been relatively stable throughout the period (1985-2017) in all income groups and in both the private and public sectors. At the same time, wage growth has been positive and stable. However, there are differences based on gender in that the pay gap has widened among women. This can probably be partly explained by the fact that women have increasingly gained well-paid jobs through higher education. The USA and the UK differ from most other countries through both increased wage dispersion and stagnant wage growth.

Changes in the composition of jobs have probably promoted increased wage dispersion in Sweden during 1970-2013, but this has been counteracted by other forces. During the 1970s and 1980s, wage dispersion decreased sharply, and the increase in wage dispersion in the second half of the 1990s and early 2000s appears to be due to increased wage differences between jobs than to changes in the composition of the labor force. There is no clear indication that the increase in wage dispersion since the mid-1990s is linked to technological developments.

6.2 Effects on occupational groups, relative wages and regions

There is evidence to suggest that declining wage developments in sectors and occupations are weaker in the long term than in other parts of the economy, although the decline is slow and mainly occurs because recruitment is lower than voluntary departures. For an individual, this can mean a poorer wage development regardless of whether one changes profession because a career change can increase the risk of periods of unemployment, but also because retraining leads to a break in wage development.

To the extent that a decline in an industry is due to technological developments and increased automation, there is thus a risk of a relatively lower wage trend. However, this does not necessarily have to be the case. Technological developments in forestry have led to a

¹⁴⁷ The ratio between the 90th and 10th percentile in Sweden is just over 2, while in the USA it is about 5, in the UK about 4 and in France about 3.

dramatic decline in employment, while remaining jobs have become more qualified and better paid.

Regional comparisons based on data at municipal level provide a positive correlation between increased use of IT and growth of wages and employment. The results do not therefore suggest that increased use of IT leads to unemployment, but rather the contrary, that it stimulates employment.

At the same time, there is a risk that technological developments will contribute to increased regional disparities. A relatively high level of activities with high IT and technology usage and where employment and wages are positively affected by technological developments exists in and around the big cities. The manufacturing industry, on the other hand, is more often localized in smaller locations and is largely subject to automation, where machines replace people.

6.3 Discussion

There seems to be a long-term trend where cognitive, social and verbal skills have become more important in the labor market, while routine or repetitive tasks and are best placed to be automated are valued less. There are good reasons to believe that this development will continue. However, the effects on the composition of the labor market, wage developments and income distribution are difficult to predict and there are very different views among economists on the consequences for the labor market. Views on the effects of machine learning also vary widely, from the assessment that it may lead to falling wages and mass unemployment to the assessment that machine learning and AI will generally not outcompete jobs.

It is also uncertain to what extent job polarisation is affected by technological development. Job polarization has been going on for a long time and there are many factors other than automation that can be behind it. One possibility that has been studied is that increased prosperity means that the demand for services is relatively greater. Given that services are produced by both the high- and low-skilled, this can contribute to polarization in the labor market.

Another structural change that may have contributed to job polarisation is the long-term increase in labor supply. The expansion of the public sector in the 1970s and 1980s led to large increases in

employment, largely in relatively low-paid jobs. There are also studies suggesting that immigration may have contributed to job polarisation through increased employment in the lowest paid jobs. This type of causal link is possible but not empirically well proven, but they suggest that job polarization is likely to be influenced by many factors, where technological development is one among several.

6.4 Assessment

The trend towards increased robotisation and automation of routine tasks has been ongoing for a long time and will continue, however this should not be dramatised. The labor market is constantly changing, but there is currently no strong reason to believe that automation would lead to a general fall in wages or falling employment. However, technical developments may – as in the past – affect wage differences between jobs and sectors and regional differences.

Appendix

The relationship between the primary balance, net lending (surplus target) and debt growth

Notation:

s = debt as a percentage of GDP

p = primary balance as a percentage of GDP

f = net lending as a percentage of GDP

 γ = nominal GDP growth

g = real GDP growth

i = nominal interest rate

r = real interest rate

 $\pi = inflation$

Let
$$\lambda = \frac{i-\gamma}{1+\gamma}$$

Note that
$$1 + \lambda = \frac{1+\gamma}{1+\gamma} + \frac{i-\gamma}{1+\gamma} = \frac{1+i}{1+\gamma} = \frac{(1+r)}{(1+q)} \frac{(1+\pi)}{(1+q)} = \frac{(1+r)}{(1+q)}$$

The time index t has been omitted for the variables $p, f \gamma, g, i, r, \lambda$ och π , i.e. growth, interest rates and savings are assumed to be constant.

The debt equation expressed as primary balance can be written as:

$$s_t = (1 + \lambda)s_{t-1} - p_t \qquad (1)$$

The change in a period will be:

$$s_t - s_{t-1} = \lambda s_{t-1} - p_t$$
 (2)

$$s_t - s_{t-1} = \frac{(i-\gamma)}{(1+\gamma)} s_{t-1} - p_t$$
 (3a)

The equation above shows that if the nominal interest rate is lower, growth and the primary balance is zero, the debt decreases as long as the growth is positive because $\frac{(i-\gamma)}{(1+\gamma)} < 0$.

Alternatively, the equation can be written as (use $1 + \lambda = \frac{(1+r)}{(1+g)}$):

$$s_t - s_{t-1} = \frac{r}{(1+g)} s_{t-1} - \frac{g}{(1+g)} s_{t-1} - p_t \quad (3b)$$

Equation 3b shows that the change in the debt ratio is only due to real interest rate, real growth and the primary balance. Inflation only has an impact on the debt ratio via the primary balance by reducing real interest costs.

However, the surplus target does not refer to the primary balance but to net lending. Net lending is the sum of primary balance and net capital. Net capital, in turn, is the sum of property income and capital expenditure. Capital expenditure mainly consists of interest expenditure. The relationship between the primary balance and net lending can be written as:

$$f_t = p_t - \frac{i}{1 + \gamma} s_{t-1} \quad (4)$$

If we use (4) in the debt equation (3), the interest rate can be shortened (5.6). The implication is that as long as the surplus target is maintained, an interest rate increase or interest rate cut will be counteracted in primary savings via taxes and expenses. The interest rate therefore has no bearing on the development of the debt. For a given level of net lending, the development of debt depends only on nominal growth in GDP.

$$s_{t} - s_{t-1} = \frac{(i - \gamma)}{(1 + \gamma)} s_{t-1} - \left(f_{t} + \frac{i}{1 + \gamma} s_{t-1} \right) = \frac{(i - i - \gamma)}{(1 + \gamma)} s_{t-1} - f_{t}$$

$$= \frac{-\gamma}{(1 + \gamma)} s_{t-1} - f_{t} \quad (5)$$

$$s_{t} = \frac{1}{1 + \gamma} s_{t-1} - f_{t} \quad (6)$$

¹⁴⁸For the sake of simplicity, it is assumed that the change in the value of public debt, for example as a result of Swedish krona changes in foreign currency debt, is zero.

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