

Separate report of
the National Audit
Office to Parliament:
Fiscal Policy
Monitoring and Audit
Report on the
2019–2022
Parliamentary Term



NATIONAL AUDIT OFFICE'S REPORTS
TO PARLIAMENT

R 25/2022 VP



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The National Audit Office monitors and assesses fiscal policy in its role as an independent national fiscal policy monitoring institution as referred to in the EU's Fiscal Compact and the European Union law. Provisions on the monitoring task are laid down in the Act on the National Audit Office of Finland (676/2000) and the Fiscal Policy Act (869/2012).

The monitoring includes assessment of the setting and implementation of the rules and binding objectives that steer fiscal policy. It comprises monitoring of compliance with the Medium-Term Objective (MTO) set for general government finances and the related correction mechanism, monitoring of the preparation and implementation of the General Government Fiscal Plan, and monitoring of compliance with the EU Stability and Growth Pact. It also comprises assessment of the realism of the macroeconomic forecasts used in fiscal policy-making as well as ex-post assessment of the reliability of the forecasts as laid down in the Government Decree on the General Government Fiscal Plan (120/2014). By monitoring fiscal policy, the National Audit Office promotes the transparency and intelligibility of fiscal rules as well as stable and sustainable general government finances.

Under section 6 of the Act on the National Audit Office of Finland, the National Audit Office submits this fiscal policy audit and monitoring report on the 2019–2022 parliamentary term to the 2022 parliamentary session.

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Main content



The Covid-19 pandemic, Russia's war of aggression in Ukraine, and the energy crisis resulting from the war have marked the development of public finances and the national economy during the 2019–2022 parliamentary term. Fiscal developments have lagged far behind the objectives set out in the Government Programme and the first General Government Fiscal Plan for the parliamentary term. The crises have also led to exceptions to the validity of the objectives.

The cyclical fluctuations during the parliamentary term have been exceptionally large compared with the previous parliamentary terms. The economy contracted sharply in 2020 as a result of the Covid-19 crisis but recovered rapidly. The economic activity was at a high level from the early summer of 2021 until the war and the energy crisis halted the positive development in the summer of 2022 and the business cycle began to fall.

The ratio of government debt to gross domestic product (GDP) rose substantially in Finland as a result of the Covid-19 pandemic. However, when compared with the other EU countries, the increase was moderate. The interest rates on public debt remained low for a long time, but in 2022 they increased clearly. This will increase the costs of the higher debt level. Assessments of the sustainability of public finances did not change significantly during the parliamentary term, but the growth in the government debt-to-GDP ratio means reduced fiscal space. During the parliamentary term, the growth in employment pension funds improved the general government net financial assets, i.e. the difference between financial assets and liabilities. However, the net financial assets of the central government have decreased. The risks involved in state guarantees and contingent liabilities have increased as a result of the crises during the parliamentary term.

Rapid cyclical fluctuations have made it more difficult to adjust the fiscal stance to the business cycle. The fiscal policy monitoring function assesses that the Government's fiscal policy supported the economy and society in a timely manner and on a sufficiently large scale at the outbreak of the Covid-19 pandemic in 2020. The fiscally significant additional expenditure resulting from Russia's war of aggression and the ensuing energy crisis in 2022 was also justified. However, after the Covid-19 pandemic, the fiscal policy stance remained too loose, which has unnecessarily contributed to heating the economy and intensifying the business cycle. The business cycle would thus have justified a tighter expenditure and income policy after 2020.

The great uncertainty about the duration and depth of the crises and the rapid cyclical fluctuations have made forecasting the economy exceptionally difficult during the current parliamentary term. The fiscal policy monitoring function assesses that the forecasts of the Ministry of Finance, on which the annual budget and the General Government Fiscal Plan are based, have nevertheless been realistic overall. The latest forecast, on which the 2023 budget proposal is based, is also realistic within the meaning of the EU framework.

The general escape clause, which allows Member States to deviate from the fiscal objectives, was activated in the EU fiscal framework in spring 2020. Due to Russia's war of aggression, the expiry of the escape clause has been postponed. At the same time, the EU

is considering amending its fiscal rules. The concept of structural balance, which is an integral part of the current rules, has proved to be very uncertain and to be revised afterwards to a significant extent. It is calculated by making a cyclical adjustment to nominal balance. There are great differences in the results of the established cyclical adjustment method common to the EU and those of the method based on the heatmap and the cyclical indicator produced by the fiscal policy monitoring function. The choice of the cyclical adjustment method may even affect conclusions on compliance with the rules. Member States' independent fiscal institutions, such as the fiscal policy monitoring function of the National Audit Office of Finland, stress that the rules should be based on clear criteria and indicators and that they should promote debt sustainability.

Due to the escape clause activated at the EU level, the statutory national fiscal planning has not been implemented as normal, either. No multiannual fiscal objectives were set in spring 2020 due to the Covid-19 pandemic. After that, objectives have been set according to the projected fiscal development. While this complies with the requirements of legislation, it means that the statutory objectives have not had a steering impact on the fiscal decision-making. The expenditure limit for local government finances was broken in 2020, and the monitoring of the limit was discontinued in violation of the decree in 2021. In 2022, the expenditure limit for local government finances was completely abandoned. In spring 2021, the General Government Fiscal Plan was not completed until on 12 May, which is in breach of the deadline laid down in the decree. Due to these exceptions, fiscal legislation has not been fully complied with during the parliamentary term.

During the parliamentary term, the Government has made several exceptions to the spending limits agreed in the Government Programme. The exceptions are largely explained by the crises that took place during the parliamentary term. Dispensing with the spending limits was justified in 2020, as the situation was very exceptional due to the Covid-19 pandemic. It was also justified to deviate from the spending limits in 2022 on account of the security policy situation, as this enabled the necessary increases in expenditure. However, the expenditure falling within the scope of the exception was defined very broadly.

The Government has also made such exceptions to the spending limits that clearly violate the principles of the spending limits system. In 2021, the Government raised the spending limits for 2022 and 2023 by EUR 900 and 500 million, respectively, in violation of the spending limits rules. Furthermore, the transfer of the funding of Veikkaus' beneficiaries in 2022 to the scope of the spending limits was carried out in a manner that was contrary to the spending limits principles. The transfer led to extra flexibility within the spending limits. In the future, it is important that the Government commits to the spending limits system as a tool for planning central government finances and develops it while also adhering to its proven strengths.

During the parliamentary term, the Government succeeded in carrying out reforms that may strengthen the sustainability of public finances. However, the long-term impacts of the health and social services reform on public expenditure are highly uncertain and depend, among other things, on the success of the funding model and economic governance of the wellbeing services counties. The Government introduced a sustainability roadmap in 2020 in order to bend the growth curve of the debt-to-GDP ratio. The content of the roadmap was expanded in 2021 with sensitivity analyses, for example. However,

the roadmap was not implemented in full, and the version of the roadmap published in 2022 did not include an up-to-date picture of the economic situation. On the basis of the experience gained during the parliamentary term, it would be useful to link the examination of the general government's debt sustainability more closely to the statutory General Government Fiscal Plan.

During the parliamentary term, the Government's employment measures clearly fail to meet the targets included in the Government's sustainability roadmap of spring 2021. The magnitude of the impacts on public finances was estimated to be EUR 1–2 billion, and the target set by the Government for the number of new employed persons was 80,000. However, it is good that the Government did not abandon its employment targets due to the Covid-19 pandemic. The Government has also decided on important employment measures, such as the removal of the right to additional days of earnings-related unemployment allowance. In relation to the baseline sustainability gap calculation, the impacts of the employment measures taken during the parliamentary term on public finances fall clearly short of the target, amounting to around EUR –130 to +380 million. However, the Government's employment rate target was achieved in practice in 2022, taking into account the changes in the way employment rate statistics are compiled.

The Government's and the ministries' publications present the anticipated impacts of employment measures inconsistently. For example, they treat employment potential estimates and actual impact estimates in a comparable manner. Due to the inconsistent presentation methods, they present different estimates of the total impacts of the measures and even of the achievement of the targets.

The outlook for general government finances is typically examined by means of well-established sustainability assessments. It is also necessary to use more detailed modelling of phenomena affecting economic growth and public finances. When the outlook for the development of human capital, i.e. educated working-age population, in Finland is assessed, a worrying trend emerges. The decline in human capital will slow down economic growth and may increase the challenges faced by general government finances. This is why raising the population's education level and increasing educated work-based immigration are important objectives.

In addition to structural reforms, it would also be important to take measures affecting revenue and expenditure directly in order to ensure debt sustainability. In strengthening public finances, it is important to choose means that are the most favourable in view of economic growth and wellbeing. When the measures to be taken are selected, it is therefore necessary to have as comprehensive a knowledge base as possible available. In its decision-making, the Government should therefore utilize the most comprehensive surveys available on the structures and impacts of public expenditure and revenue.

1 Fiscal rules and steering instruments

The Covid-19 pandemic, Russia's war of aggression in Ukraine, and the energy crisis resulting from the war have marked the development of public finances and the national economy during the 2019–2022 parliamentary term. Fiscal developments have lagged far behind the objectives set out in the Government Programme and the first General Government Fiscal Plan of the parliamentary term.

The crises have also led to exceptions to the validity of objectives. The general escape clause, which allows Member States to deviate from the fiscal objectives, was activated in the EU fiscal framework in spring 2020. Later, the expiry of the escape clause was postponed due to Russia's war of aggression. At the same time, the EU is considering amending its fiscal rules.

Due to the exceptional circumstances decided on at the EU level, the statutory national fiscal planning has not been implemented as normal, either. No fiscal objectives were set in spring 2020 due to the Covid-19 pandemic. After that, objectives have been set according to the projected development. While this complies with the requirements of legislation, it means that the statutory objectives have not had a steering impact on public finances. The expenditure limit set for local government finances was broken in 2020, and its monitoring was discontinued in violation of the decree in 2021. In 2022, the expenditure limit for local government finances was completely abandoned.

During the parliamentary term, the Government has made several exceptions to the spending limits agreed in the Government Programme. The exceptions are largely explained by the crises that took place during the parliamentary term. However, the Government has also made such exceptions to the spending limits that clearly violate the principles of the spending limits system. In the future, it is important that the Government commits to the spending limits system as a tool for planning central government finances and develops it while also adhering to its proven strengths.

1.1 The fiscal objectives set by the Government Programme and the national legislation have been flexible during the parliamentary term

During the previous government term, 2015–2019, the government debt-to-GDP ratio fell in 2019 from its post-financial-crisis high level below the 60% reference value of the EU Treaty. (However, the methodological change made in summer 2022 caused the government debt-to-GDP ratio for the year 2019 to increase to 64.9% in the general government debt statistics¹.) However, the outlook for the development of general government debt was gloomy: according to the Ministry of Finance's summer 2019 forecast, the general government debt ratio would start growing again at the beginning of the 2020s. The general government deficit, which has continued since the financial crisis, was also projected to continue.

The Covid-19 pandemic further weakened the outlook for the government debt-to-GDP ratio. In 2019–2020, the debt ratio increased from 64.9% to 74.8% and the deficit from 0.9% to 5.5% in relation to GDP (see Figure 1). As a result of the surprisingly rapid recovery of economic growth from the pandemic, the debt ratio started to decrease in 2021–2022. However, it is forecast to start increasing again already in 2023 as a result of declining economic growth and central and local government primary balances and interest expenses, which are expected to grow in the next few years. The forecast government debt-to-GDP ratio is 72.7% for 2023 and as high as 76% for 2026.

The central government deficit is projected to decrease significantly in 2022, primarily because many of the Covid-19-related support measures will end. However, it is projected to start increasing again already in 2023 as a result of slower tax revenue growth, increasing interest payments on central government debt, and measures taken to support households to offset the electricity price increases. From 2025 onwards, the deficit will also increase because of the fighter procurement. Local government deficits will also increase, although the responsibility for organizing health and social services and rescue services will transfer from municipalities to the wellbeing services counties starting from 2023, which will significantly reduce the spending needs of municipalities. In the coming years, the deficit of the local government will be attributable to a sustained high level of investment. The wellbeing services counties will start their operations in deficit in 2023 and are also expected to remain in deficit in 2024–2026.

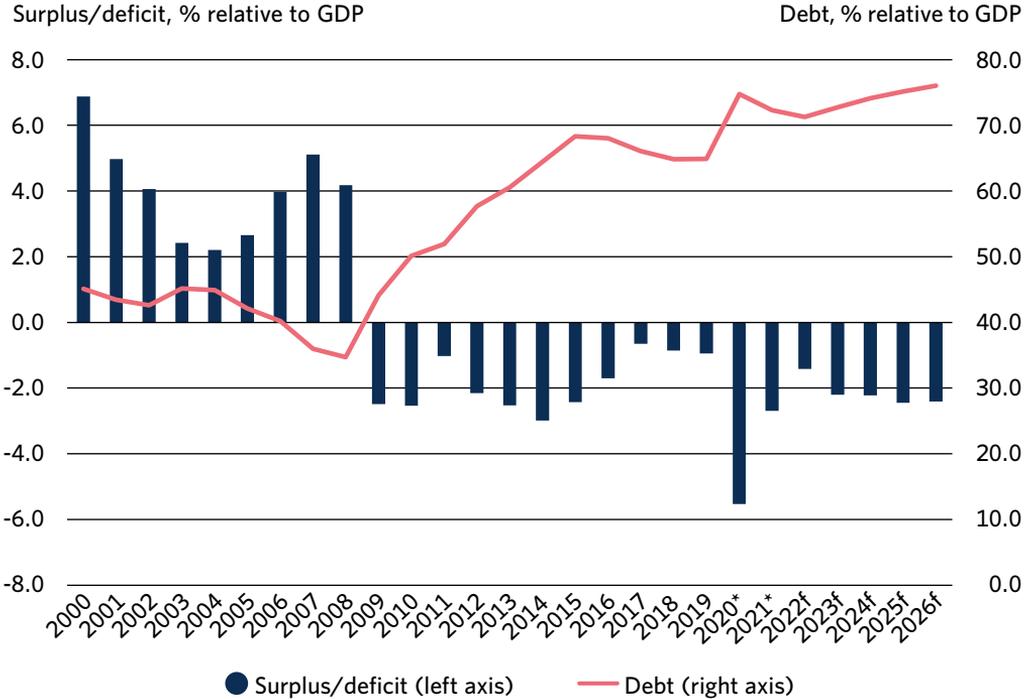


Figure 1: Development of general government deficit and debt in 2000–2026. Source: Ministry of Finance (autumn 2022) and Statistics Finland.

The surplus of employment pension institutions in the coming years will be around one per cent in relation to GDP. Although pension expenditure will increase, the rising interest rates will increase property income. The fiscal position of other social security funds will show a slight surplus in the coming years, primarily as a result of a reduction in unemployment. The surplus of employment pension institutions and other social security funds will not be sufficient to offset the deficit of the central and local government. Therefore, the general government as a whole will remain in deficit in the next few years (see Figure 1).

The objectives set by the Government Programme of Prime Minister Rinne/Marin included balanced public finances and decreasing government debt-to-GDP ratio under normal global economic circumstances

The fiscal policy objective set by the Government Programme of Prime Minister Rinne/Marin was balanced general government finances in 2023 and decreasing government debt-to-GDP ratio (Table 1). The achievement of the objective was considered to rely on the achievement of the employment rate target. The Government Programme outlined that the employment rate would be raised from 72.6% in 2019 to 75%, and the number of people employed would increase by at least 60,000 by the end of 2023. The Government set the central government spending limits to be EUR 1.4 billion higher in 2023 (at the 2020 price level) than in the technical spending limits decision of 4 April 2019.

In the General Government Fiscal Plan of autumn 2019, the Government set the statutory targets for the general government structural balance and multiannual targets for the general government nominal fiscal position, expenditure, and gross debt. In addition, the Government set a target for the nominal fiscal position of the subsectors of the general government (central government, local government, employment pension institutions, and other social security funds) in 2023. The Government set the structural balance target at -0.5% relative to GDP, which is the lowest possible target level for Finland under the 'Fiscal Compact', i.e. the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union² (24/2013). For the nominal fiscal position, it set a gradually improving path: the fiscal position should be 0.0% in relation to GDP at the end of the government term in 2023. The aim was to reduce public expenditure and the government debt-to-GDP ratio.

In addition, the Government set an expenditure ceiling for 2020–2022 and a limit on local government expenditure, i.e. a limit in euro that is set to the change in local government expenditure due to central government measures and that is consistent with the local government fiscal position target. The limit on local government expenditure is laid down in the Decree on the General Government Fiscal Plan (120/2014). According to the Ministry of Finance's autumn 2019 forecast, the targets set by the Government would not be achieved merely by complying with the central government spending limits and the limit on local government expenditure, but it would require the Government to take new measures to improve the employment rate and productivity.

Table 1: Fiscal targets set by the Government for the parliamentary term and an assessment of their achievement

Target	Baseline in 2019	Assessment of the situation in 2023 (Ministry of Finance, Economic Survey, Autumn 2022)	Assessment of the achievement of the target
General government structural balance, % in relation to GDP			
-0.5 %	Based on the data in 2019, the deficit was -1.3% in 2019 Based on current data, -1.2% in 2019.	-1.5 %	Based on current data, the target will not be achieved. The target is subject to the EU's general escape clause, which is currently in force.
Nominal balance, % in relation to GDP			
General government GP: 0.0% under normal global economic circumstances <i>Updated target GGFP 2023-2026: -1.7%</i>	-0.9%	-2.2%	The original GP objective is in force under normal global economic circumstances. In its 2021 discussion on spending limits, the Government specified that the target set for general government finances was to bend the growth curve of the government debt-to-GDP ratio (see below). Based on current data, the updated GGFP target will not be achieved.
- central government GGFP 2020-2023: maximum -0,5% <i>Updated target GGFP 2022-2025: about -2.25%</i>	-1.1%	-3%	Based on current data, the updated GGFP target will not be achieved.
- local government GGFP 2020-2023: maximum -0,5% <i>Updated target GGFP 2022-2025: about -0.5 %</i>	-1.3%	-0.4%	Based on current data, the target is close to being achieved.
- wellbeing services counties GGFP 2022-2025: close to balance	-	-0.2%	Based on current data, the target is close to being achieved.
- employment pension institutions GGFP 2020-2023: around 1%	1.1%	1.3%	Based on current data, the target is close to being achieved.
- other social security funds GGFP 2020-2023: around 0% <i>Updated target GGFP 2022-2025: close to balance</i>	0.3%	0.1%	Based on current data, the target is close to being achieved.

Target	Baseline in 2019	Assessment of the situation in 2023 (Ministry of Finance, Economic Survey, Autumn 2022)	Assessment of the achievement of the target
Government gross debt, % in relation to GDP			
GP: The government debt-to-GDP ratio decreases under normal global economic circumstances <i>Updated target in sustainability roadmap (30 April 2021): stabilization of the debt ratio by the middle of the decade</i>	64.9% in 2019	72.7% in 2023 and 75.2% in 2025	Based on current data, the target will not be achieved.
Employment			
GP: Employment rate 75% in 2023 (at least 60,000 new employed people in a normal business cycle) <i>Updated target in sustainability roadmap: 80,000 new employed people by the end of the decade (16 September 2020)</i> <i>Employment rate 75% by the middle of the decade (30 April 2021)</i>	71.6%	73.8%	The updated employment rate target has in practice been achieved in 2022, taking into account the statistical changes (the employment rate was 74.4% in October 2022). The target concerning new employed people will not be achieved by the decisions taken so far. See also chapter 3.3.
Limit on local government expenditure			
The net impact of the measures taken by the Government in 2023 will increase the local government's operating expenses by up to EUR 520 million from the spring 2019 technical General Government Fiscal Plan.	-	-	The local government expenditure limit was found to have been exceeded in spring 2020. The expenditure limit was no longer monitored in spring 2021, and in spring 2022, the expenditure limit was removed from the Decree on the General Government Fiscal Plan.

Sources: Statistics Finland, Government Programme (GP), Ministry of Finance (General Government Fiscal Plan (GGFP) for 2020–2023, General Government Fiscal Plan for 2021–2024, General Government Fiscal Plan for 2022–2025, General Government Fiscal Plan for 2023–2026, 2023 Draft Budgetary Plan, Economic Survey, Autumn 2022, and Government's Sustainability Roadmap 2020, 2021).

As a result of the Covid-19 pandemic, the Government dispensed with the central government spending limits for 2020 and did not set any multiannual objectives for the fiscal position

In March 2020, the Government, in cooperation with the President of the Republic, pronounced that exceptional circumstances were prevailing in Finland due to the Covid-19 pandemic. In the spring 2020 General Government Fiscal Plan, the Government did not set any multiannual objectives for the general government fiscal position as required by section 3 of the Decree on the General Government Fiscal Plan (Figure 1). The Government justified the decision to not set the objectives by the exceptional circumstances referred to in Article 3(3)(b) of the Fiscal Compact (24/2013). The start of the exceptional circumstances was decided in the EU in spring 2020 when the general escape clause of the Stability and Growth Pact was activated. According to the Government, “Domestic legislation on fiscal policy target setting may be interpreted accordingly. It is not sensible to set multiannual targets for general government finances until there is a stronger understanding of the fundamentals.” (Ministry of Finance 2020, p. 8–9³). At the same time, the Government stated that the central government spending limits do not restrict additional expenditure in 2020, but that the spending limits set in the autumn 2019 General Government Fiscal Plan would again be adhered to from 2021. In the same General Government Fiscal Plan, it was also stated that the limit on local government expenditure would be exceeded due to an increase in the cost estimates for the new tasks and obligations to be assigned to the local government according to the Government Programme.

The Covid-19 pandemic clouded the outlook for general government finances. According to the spring 2020 forecast of the Ministry of Finance, general government finances will remain in deficit in 2023 and the government debt-to-GDP ratio will rise despite the objectives that Prime Minister Marin’s Government Programme has set for balanced general government finances in 2023 under normal global economic circumstances and decreasing debt ratio. In the spring 2020 General Government Fiscal Plan, the Government justified the projected outlook for public finances, which was contrary to the objectives set, by the Covid-19 situation, as a result of which the international economy cannot be considered to be in a normal situation in 2023 (Ministry of Finance 2020, p. 10⁴).

According to the assessment of the fiscal policy monitoring function, the exceptional practices described above were justified because of the crisis. However, the fiscal policy monitoring function pointed out in spring 2020 that, under the national legislation, it would not have been possible to set no multiannual objectives for the general government fiscal position, but that the legislation would have made it possible to set more flexible objectives so that they would not lead to the achievement of the structural fiscal position objective (medium-term objective, MTO). At that time, the fiscal policy monitoring function also required that the Government should strive to return to normal fiscal planning as soon as possible. In its spring 2020 assessment of the management of general government finances (Fiscal policy monitoring 2020, p. 7⁵), the fiscal policy monitoring function agreed with the Government that the global economic circumstances were not normal because of the severe shock caused by the Covid-19 crisis.

In the sustainability roadmap of summer 2020, the Government set an objective to stabilize the debt ratio by 2030; in spring 2021, the objective was brought forward to 2025

The impact of the Covid-19 pandemic on the economy and the measures taken by the Government to address the situation and to support companies and households increased Finland's indebtedness and clouded the outlook for general government finances even further. In spring 2020, the Ministry of Finance forecast that Finland's general government deficit would grow by EUR 14 billion, reaching EUR 16.6 billion, or 7.2% of GDP, in 2020. The government debt was forecast to rise to almost 70% of GDP in 2020 and to be close to 80% of GDP in 2024. In June 2020, the Government set an objective to stabilize the government debt-to-GDP ratio by the end of the decade (more about the sustainability roadmap in chapter 3). In the budget negotiations of autumn 2020, the Government announced that the target was 80,000 new employed people by the end of the decade. In the Government Programme, the target had been 60,000 new employed people in 2023 (more about employment targets in chapter 3).

However, the Finnish economy survived 2020, the year of the pandemic, better than anticipated. GDP decreased significantly less in Finland than projected in summer 2020. When the sustainability roadmap was updated in spring 2021, the objective of bending the growth curve of the debt-to-GDP ratio was brought forward to mid-decade. At the same time, the Government postponed the target of a 75% employment rate, set in the Government Programme, from 2023 to 2025. In spring 2022, the Government did not publish an update of the sustainability roadmap. The sustainability roadmap updated in February 2022 was not published until in October 2022. However, the objective of stabilizing the debt ratio remains unchanged in the updated roadmap, and the picture of the debt ratio situation presented in it is based on the forecast of the development of the government debt-to-GDP ratio published by the Ministry of Finance in autumn 2021, i.e. more than a year ago.

The General Government Fiscal Plan prepared in spring 2021 met the requirements of legislation, but there were no grounds for raising the expenditure ceiling for 2022 and 2023

In the spring 2021 General Government Fiscal Plan for 2022–2025, the Government returned to the normal planning practice as required by the fiscal policy monitoring function, albeit only partially. The Government set multiannual objectives for the nominal fiscal position (Figure 1 and Table 2), expenditure and debt, and objectives for the fiscal position of general government subsectors in 2023 in compliance with the requirements of legislation. However, the General Government Fiscal Plan was not approved by the Government and submitted to Parliament until on 12 May 2021, whereas the deadline laid down in the Decree on the General Government Fiscal Plan is the end of April.

In spring 2021, the fiscal policy monitoring function stated that due to the flexibility of the fiscal position objectives, the objective to stabilize the debt ratio had a stronger steering impact on fiscal policy. In its sustainability roadmap, the Government set the objective to stabilize the debt ratio by 2025. The fiscal policy monitoring function urged the Government to prepare for the possibility that the need to strengthen public finances in

order to stabilize the government debt-to-GDP ratio could also increase as the economic outlook changes. The fiscal policy monitoring function considered it desirable to bring the debt ratio to a downward path, which would support the capacity of public finances to cope with any future crises.

In the spring 2021 General Government Fiscal Plan, the Government raised the expenditure ceiling for 2022 and 2023, thereby deviating from the ceiling agreed at the beginning of the parliamentary term. The fiscal policy monitoring function underlined that “Exceeding the spending limits undermines the role of the spending limits system in curbing the growth of expenditure, as it may lead to easier deviation from the spending limits in the future. Secondly, raising the level of expenditure without corresponding income decisions will drive public finances further away from balance in 2022 and 2023.” (Fiscal policy monitoring 2021⁶). Compliance with the spending limits system is discussed in section 1.2 below.

The limit on local government expenditure was abandoned in the middle of the parliamentary term in violation of the Decree on the General Government Fiscal Plan

In the General Government Fiscal Plan for 2022–2025 (12 May 2021), the Government suddenly abandoned monitoring the limit on local government expenditure, contrary to the Decree on the General Government Fiscal Plan. The Government justified this decision by the establishment of wellbeing services counties in 2023, wherefore it is no longer sensible to monitor the expenditure limit. However, the fiscal policy monitoring function pointed out that the valid decree requires that the limit on local government expenditure should be monitored. Only one year later (on 28 April 2022), the Government issued an amendment to the decree to waive the requirement to include the local government expenditure limit in the General Government Fiscal Plan.

The limit on local government expenditure was a relatively new central government steering instrument, which had only been used in two parliamentary terms. Its purpose was to set a limit in euros on the costs of new or expanded tasks of the local government. It was laid down in the Decree on the General Government Fiscal Plan in 2014 and set for the first time in the General Government Fiscal Plan for 2016–2019. At the same time that the limit was laid down, the Local Government Act was amended to allocate a 100% statutory government contribution for new or expanded tasks and obligations of the local government. In practice, this 100% government contribution formed a more significant restraint on the central government than the limit on local government expenditure, as the costs of any new and expanded tasks the central government assigned to the local government would be financed by the central government.

The General Government Fiscal Plan 2023–2026 was influenced by Russia's war of aggression in Ukraine and the resulting energy crisis, as well as the high inflation

The General Government Fiscal Plan 2023–2026, prepared in spring 2022, included a number of measures that the Government had decided to take due to Russia's war of aggression in Ukraine and the resulting energy crisis. At the same time, the Government

confirmed that the objective set for structural balance in autumn 2019, -0.5% in relation to GDP, was valid. This is the minimum requirement to which Finland is committed in the Fiscal Compact.

At the same time, the Government set the statutory multiannual targets for public finances. The Government kept the nominal fiscal position target for 2023 unchanged from the one presented in the General Government Fiscal Plan of spring 2021. The target set for the general government nominal fiscal position is therefore -1.7% relative to GDP (see Figure 2), which does not correspond to the objective of balanced public finances in 2023 (under normal global economic conditions), set in the Government Programme. The fiscal position target set for 2023 is in line with the independent forecast of the Ministry of Finance. Thus, the target cannot be considered particularly ambitious, but it nevertheless complies with the requirement of legislation. According to the established practice, the fiscal position targets set for the years 2024–2026 are in line with the forecast of the Ministry of Finance, as the parliamentary term will change in 2023.

The target set for general government nominal fiscal position is in deficit and not in line with the Government Programme, which the Government justified with the prevailing economic uncertainty. In addition, the loose target set for 2023 was justified by the fact that exceptional circumstances as referred to in the national fiscal legislation were prevailing in 2022⁷ (Ministry of Finance 2022⁸). The Government also pointed out that the target set for the general government deficit (1.7% relative to GDP) complies with the 3% deficit reference value set by the EU Treaty. The Government also stated that the deficit target was in line with the fiscal recommendations adopted by the EU Council for Finland in June 2021 and the fiscal guidance provided by the Commission in March 2022. The Council recommended and the Commission instructed that the fiscal stance should be growth-supportive in 2022 and neutral in 2023, including the use of the Recovery and Resilience Facility.

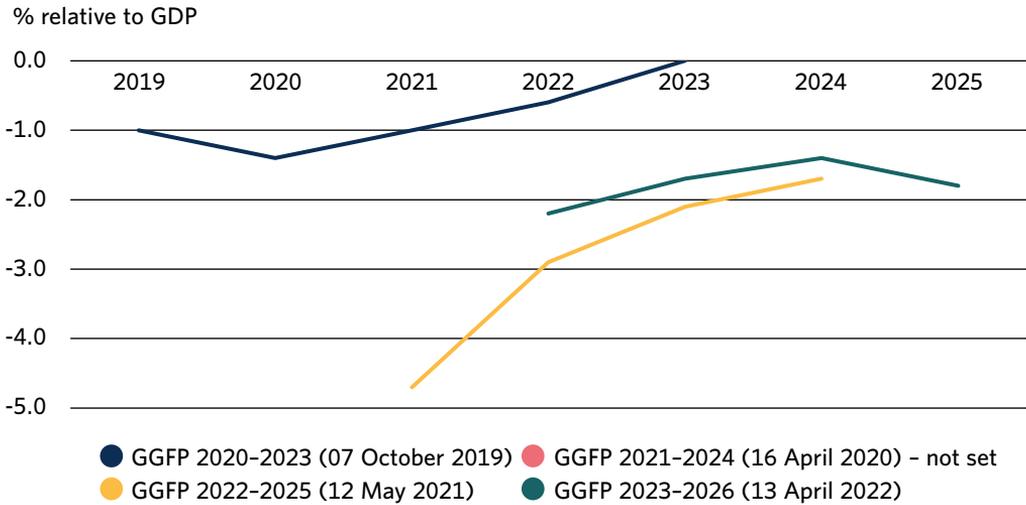


Figure 2: Multiannual targets for the general government nominal fiscal position. Source: General Government Fiscal Plans for 2020–2023, 2021–2024, 2022–2025, and 2023–2026, Ministry of Finance.

Table 2: General government nominal fiscal position targets for 2023 by sector.

General Government Fiscal Plan	Central government	Local government	Wellbeing services counties	Employment pension institutions	Other social security funds
GGFP 2020-2023 (7 October 2019)	maximum -0.5% relative to GDP	maximum -0.5% relative to GDP	-	about 1% relative to GDP	about 0% relative to GDP
GGFP 2021-2024 (16 April 2020)	Not set	Not set	Not set	Not set	Not set
GGFP 2022-2025 (12 May 2021)	about -2.25% relative to GDP	about -0.5% relative to GDP	close to balance	about 1.0 % relative to GDP	close to balance
GGFP 2023-2026 (13 April 2022)	about -2.25% relative to GDP	about -0.5% relative to GDP	close to balance	about 1.0% relative to GDP	close to balance

Measures have to be taken in the next parliamentary terms to balance public finances

During the 2019–2023 parliamentary term, public finances have weakened further as a result of the Covid-19 crisis, the crisis in Ukraine, and the energy crisis. Public finances must be strengthened in the coming government terms in order to stabilize the debt-to-GDP ratio and, above all, to bend its growth curve. In the next few years, public finances will be weakened by the additional expenditure on security and the green transition following Russia’s war of aggression, as well as the projected modest economic growth. According to the Ministry of Finance’s autumn 2022 forecast, the debt ratio will turn to growth in 2023 as a result of these factors and amount to 76% in 2026. The Covid-19 crisis, Russia’s war of aggression, and the resulting energy crisis have also increased the risk arising from central government contingent liabilities. A significant risk to public finances is also posed by the start of the operations of the wellbeing services counties in 2023 as well as their funding, which comes almost fully from the state. Due to the ageing of the population, general government revenue and expenditure will be unbalanced in the longer term.

The new Government will set economic and fiscal targets in its Government Programme and first General Government Fiscal Plan. In addition to setting targets, the Government should also define how to achieve them. The definition of the targets is also required by the Decree on the General Government Fiscal Plan, according to which the General Government Fiscal Plan shall present in detail the measures required for achieving the fiscal position targets set for the general government and its subsectors.

The projections used for planning the measures illustrate the development of general government finances if no new political decisions are taken. This sets high requirements for their quality and reliability. The National Audit Office audited (National Audit Office 2019⁹ and 2020¹⁰) the medium-term projections (the current year and the next four years) prepared by the Ministry of Finance and found that, overall, the Ministry had prepared the projections appropriately. The Ministry has included discretionary policy measures in its projection in compliance with the guidance of the EU Commission. However, there have been rather big differences between the original projections and the actual revenue and expenditure due to, for example, the revision of the statistical data used in the preparation of the projections.

As projections may be revised, measures tied to them may also prove either inadequate or excessive. The impact of the measures on general government finances is also surrounded by many uncertainties. There is uncertainty, in particular, when the adjustment is not made directly through tax criteria changes or legislative amendments related to expenditure. For example, an improvement in the employment rate may have very different impacts on the balance of general government finances, depending on whether it is caused by an increase in full-time or part-time employment. Although it may be difficult to assess the impacts of certain measures, it is not justified to select primarily measures that are easier to assess. However, the Government can strive to ensure that measures are implemented as planned. During the government term, it would therefore be important to have checkpoints to assess the impacts of the decisions taken on the balance of general government finances and to consider the need for additional measures. In its final report, the working group appointed by the Ministry of Finance to develop the steering of general government finances recommended that the Government's mid-term review serve as such a checkpoint (Ministry of Finance 2022¹¹).

Fiscal legislation should be revised as regards the correction mechanism

According to section 3 of the Fiscal Policy Act (869/2012), the Government shall take any measures it deems necessary to improve the stability and sustainability of public finances if it assesses that there is a significant deviation in the general government structural fiscal position that endangers the achievement of the medium-term objective. A significant deviation is defined in EU legislation.

The EU Council can identify a significant deviation in the opinion it issues on Finland's Stability Programme and recommend Finland to take corrective action. If the Council finds a deviation, the Government shall submit a report to Parliament in accordance with section 44 of the Constitution of Finland. The report shall contain an estimate of the amount of deviation in structural balance in relation to the medium-term objective or the adjustment path leading to it. The Government shall also specify the legislative and other measures to be taken to rectify the deviation by the end of the following calendar year. If the Council adopts a decision confirming that Finland has not taken adequate corrective action, the Government shall, without undue delay, submit a communication referred to in section 44 of the Constitution to Parliament. The communication shall include an estimate of the amount of the deviation in structural balance compared with the medium-term objective or the adjustment path leading to it, as well as a report on the necessary legislative and other measures to rectify the deviation by the end of the following calendar year.

According to section 4 of the Fiscal Policy Act, corrective action need not be taken if the EU Council has expressly stated that exceptional circumstances are prevailing in Finland. In spring 2020, the Commission, supported by Member States, activated the general escape clause of the Stability and Growth Pact¹². It allowed Member States to deviate from their structural balance objective (MTO) or the adjustment path leading to it in order to stimulate the economy. In May 2022, the Commission extended the validity of the escape clause until the end of 2023. During the validity of the general escape clause, the EU Council has not issued recommendations for the correction of significant deviations in structural balance. The Government, on the other hand, has interpreted that the Com-

mission's decision on the activation of the general escape clause applies to exceptional circumstances as provided in Article 3(3)(b) of the Fiscal Compact¹³ and as referred to in section 4 of the Fiscal Policy Act.

Under section 5 of the Fiscal Policy Act, if the Council has expressly stated that exceptional circumstances as referred to in section 4 no longer prevail in Finland, the Government shall decide on measures to be taken in the same or the following calendar year to improve the general government structural fiscal position by at least 0.5 percentage points. The National Audit Office of Finland shall issue an opinion on the adequacy of the measures.

There has been no need for the Government to take corrective action during the current parliamentary term, as the EU Council has not issued a recommendation for corrective action. It remains unclear what will happen after the general escape clause expires (Fiscal policy monitoring 2021¹⁴ and 2022¹⁵). It is unclear whether the Government should take corrective action under section 5 of the Fiscal Policy Act in the same or at the latest in the following calendar year, even though the EU Council has not issued a recommendation for corrective action (i.e. section 3 of the Act has not been applied) and there has been no need to apply the escape clause under section 4. The fiscal legislation should be clarified in this respect, and any amendments to the EU Stability and Growth Pact should also be taken into account (see section 1.3 for further details).

1.2 The Government has made a number of exceptions to the spending limits rule of the Government Programme during the parliamentary term

The spending limits rule set in the Government Programme in 2019 has not been complied with in any year during the parliamentary term. In 2019, the Government that had just taken up office abandoned the supplementary budget reserve of EUR 260 million that the previous Government had left unused and made a new supplementary budget reserve of EUR 300 million.

In 2020, compliance with the spending limits rule was dispensed with completely because of the Covid-19 pandemic. During the year, the Government adopted seven supplementary budgets, and the expenditure ceiling set in the Government Programme was eventually exceeded by EUR 8.437 billion. Cyclical expenditure falling outside the spending limits increased as well in 2020.

Compliance with the spending limits rule was restored in 2021, but a number of exceptions were made to the expenditure ceiling set in the Government Programme. The spending limits were raised by EUR 1.85 billion for additional expenditure arising from the pandemic, and expenditure falling outside the spending limits was increased by EUR 2.2 billion. Furthermore, the activation of the mechanism for exceptional circumstances enabled a EUR 500 million increase in the spending limits.

In 2022, new exceptions were made to the spending limits rule. The expenditure ceiling was raised by EUR 1.779 billion because of the security policy situation and by EUR 500 million through the mechanism for exceptional circumstances. In addition, a provision of EUR 339 million was made within the spending limits for the management of the Covid-19

pandemic. Expenditure falling outside the spending limits was also increased by EUR 51 million due to the security policy situation and by EUR 373 million due to the pandemic. The Government also made a provision of EUR 10 billion as a financial investment under the spending limits rule for financing energy companies. In addition, the expenditure ceiling had to be raised by EUR 900 million so that the budget would not exceed the spending limits. The raising of the expenditure ceiling was carried out in violation of the spending limits rule. Although the spending limits rule was in force, it was not complied with in 2022.

There are currently no valid exceptions for 2023 that would raise the expenditure ceiling because of the Covid-19 pandemic or the business cycle. The direct health security costs related to the pandemic will continue to be covered as expenditure outside the spending limits. A total of EUR 46 million have been budgeted for them by the supplementary budget proposal. Due to the security policy situation, the expenditure ceiling has been raised by EUR 2.240 billion. Furthermore, the expenditure ceiling was raised by an additional EUR 228 million as part of the transfer of the funding of the beneficiaries of Veikkaus to the spending limits in violation of the spending limits rule and also by EUR 483 million intended to cover budgeted expenditure exceeding the spending limits. Both increases breached the spending limits rule, wherefore the calculation of the 2023 spending limits has not complied with the rule, either.

Table 3: Table on the spending limits of the parliamentary term

Calculation of the spending limits during the government term	2020	2021	2022	2023
Technical spending limits	44,853	46,417	46,582	46,716
Spending limits expenditure according to the Government Programme total	2,058	2,884	2,518	1,400
— permanent additional expenditure within the spending limits	1,078	1,375	1,318	1,370
— permanent reallocations of spending limits expenditure	-50	-50	-125	-100
— one-off future-oriented investments (spending limits expenditure)	730	419	175	-
— provision for the financing of future-oriented investments	-	840	850	-
— supplementary budget provision	300	300	300	100
Transfer of compensations for tax revenue losses incurred by municipalities during the previous parliamentary term to the spending limits	1,012	1,012	1,012	1,012
Provision for unforeseen expenditure needs in 2020-2022	150	244	135	-
Spending limits of the parliamentary term (incl. the supplementary budget provision)	48,073	50,557	50,247	49,128
Structural adjustments, total	-1,341	2,112	2,758	15,815
Changes in justifications	-1,213	-266	-105	-192
Technical corrections (timing change, re-budgeting, pass-through item, technical change)	-159	27	-1,844	251
Funding of the wellbeing services counties	-	-	1,956	12,525
Mechanism for exceptional circumstances	-	500	500	-
Expenses arising from the Covid-19 situation (within the spending limits)	-	1,850	351	-
Transfer to the spending limits due to the security policy situation	-	-	1,779	2,240
Transfer of the funding of Veikkaus' beneficiaries to the spending limits	-	-	-	990
Use of the unallocated reserve carried over from the previous year	31	-	121	-
Price adjustments, total	-34	602	1,495	4,069
Changes to the spending limits (+/-)	-	-	900	450
Spending limits of the parliamentary term, amendment to the 2023 budget proposal and supplementary budget proposal IV 2022	46,697	53,271	55,400	69,461
Budgeted within the spending limits	55,135	53,149	55,129	69,283
Not budgeted within the spending limits	-8,437	2	271	178
Budgeted outside the spending limits	13,605	14,690	22,757	12,057
Total amount budgeted	68,740	67,839	77,885	81,340
Final accounts	67,074	66,002	-	-

Spending limits expenditure has risen to a new level during the parliamentary term

Figure 3 shows the expenditure budgeted within and outside the spending limits between 1980 and 2023, adjusted to the 2021 price level. The impact of wellbeing services counties on the 2022 and 2023 spending limits has been removed from the figure. The budgeted expenditure has risen to a new level in 2020–2023 compared with the previous parliamentary terms. Expenditure continues to increase in 2023 even if the new expenses arising from the wellbeing services counties are not taken into account in the spending limits. The additional expenditure under the exceptions is intended to be temporary. However, permanent increases have also been made in spending limits expenditure during the Government term, and they have raised the expenditure ceiling from the one set in the Government Programme.

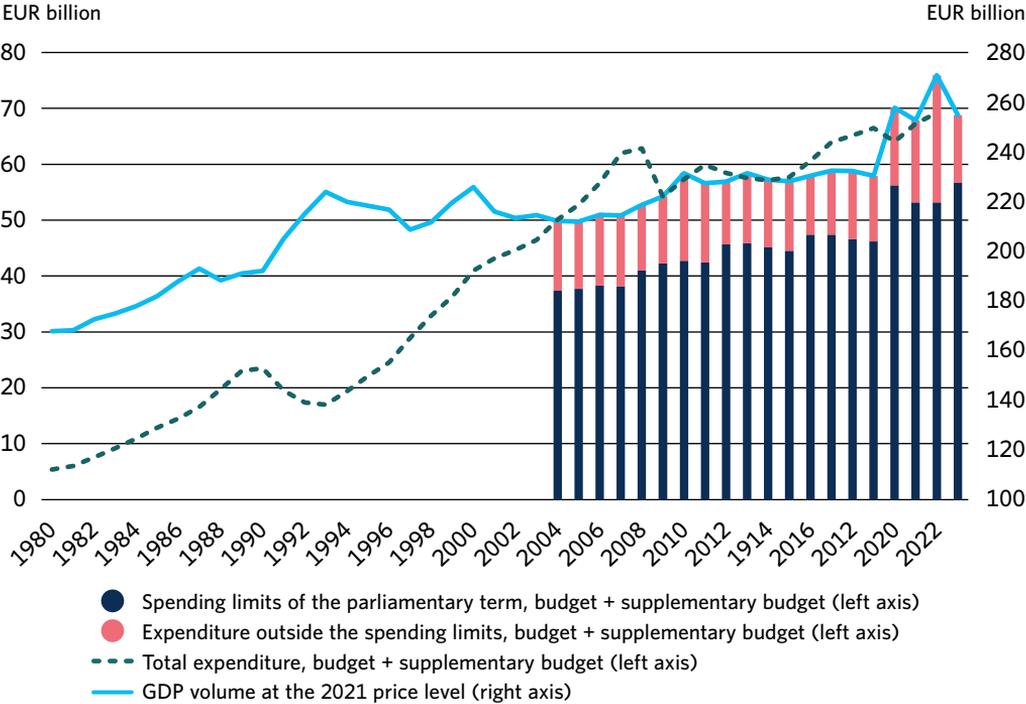


Figure 3: GDP and budgeted expenditure between 1980 and 2023 at the 2021 price level (2022 and 2023 at current prices). The spending limits rule was not in force in 2020. Source: NAOF's calculation, Ministry of Finance, Statistics Finland.

The fiscal policy monitoring function considers most of the exceptions to the spending limits rule during the parliamentary term to be justified. The Covid-19 pandemic and Russia's war of aggression in Ukraine have been exceptional situations, and the spending limits rule set in the Government Programme would not have made it possible to respond to them. It has been justified to enable unexpected additional expenditure necessary for the management of the situation by a clearly defined exception to the spending limits rule.

However, the spending limits have also been exceeded during the parliamentary term for other reasons. The Government has increased the spending limits expenditure by EUR 900 million in 2022 and EUR 686 million in 2023 to cover the expenses of Government Programme measures not related to the exceptional circumstances. According to the spending limits rule, these expenses should have been prioritized without breaching the spending limits. In addition, the expenditure falling within the scope of the exceptions has also included expenses that will remain permanent and expenses that are only loosely related to the exceptional circumstances. For example, the exception related to security policy includes expenditure intended to be permanent, and the additional expenditure arising from the Covid-19 situation have been justified indirectly, for example by recovery targets. Justifying the expenditure covered by exceptions in a very general manner, e.g. by emphasizing the recovery target, will more likely result in additional expenditure that is permanent or overlaps with other targets.

The principles steering compliance with the spending limits rule need not be changed

The spending limits rule has proven to be a well-functioning tool for planning and implementing public spending. The exceptions made during the current parliamentary term do not indicate that the principles of the spending limits rule should¹⁶ be changed. The different Governments complied with the spending limits they had set from 2004 to 2019, i.e. for almost the entire period of the current system's existence. The spending limits rule includes a margin of manoeuvre for unexpected expenditure that may arise during the parliamentary term. It also includes such principles promoting flexibility that do not undermine the binding nature of the rule.

During the current government term, the political commitment to the spending limits rule has deteriorated in an unprecedented manner. The National Audit Office addressed this issue in its audit report *Functioning of the central government spending limits system* (8/2021). The exceptional situations and crises have, in practice, made it possible to breach the spending limits rule with broad political and public approval. However, there also seem to be longer-term underlying factors.

The spending limit decisions were introduced in 1991, when the state's ability to settle its debts and credibility in the eyes of creditors were at stake. Since 2004, the spending limits system, in turn, has contributed to convincing the debt market of the reliability of the state's financial management and of the state's ability to pursue a predictable expenditure policy. After the financial crisis of 2008, the costs of central government debt declined even though the amount of debt has increased every year for almost 15 years, regardless of the business cycle. Despite the increase in the amount of debt, it has seemed unlikely that the state's ability to settle its debts would weaken.

In recent years, the spending limits system has been criticized for being inflexible and outdated, and it has been proposed, for example, that investments should be transferred outside the spending limits. The principles of the spending limits rule function well. However, in the audit carried out by the National Audit Office on the functioning of the spending limits system, it was found that after the financial crisis, the independence of the spending limits of revenue has turned into a weakness of the system.

Future Government Programmes could strive to set the expenditure ceiling more realistically so that it takes into account the expenditure needs during the government term, leaving a sufficient margin of manoeuvre that grows towards the end of the parliamentary term for unexpected expenditure. More flexible spending limits could increase political commitment to them. However, this may conflict with an expenditure policy to promote balanced central government finances. The aim has been to keep the level of expenditure stable, i.e. neutral from the perspective of the taxpayers' burden, and before the current parliamentary term, this aim has also been achieved. It is difficult to reconcile a level of expenditure that guarantees flexibility with balanced central government finances if income policy is addressed separately from the level of expenditure.

It would be important to reconcile a level of expenditure that enables the objectives set in the Government Programme to be achieved with balanced central government finances. According to the fiscal policy monitoring function, to achieve this, it would be useful to coordinate revenue and expenditure policy in greater detail in the Government Programme and to reassess the situation during the parliamentary term.

The following government term will determine the credibility of the spending limits system

The next Government will play an important role in defining the future of the spending limits system. The spending limits rule used in Finland differs from corresponding systems and expenditure objectives of many other European countries in its transparency and predictability. Finland's spending limits are set and updated from the bottom up as part of the budget process. This enables the expenditure ceiling to be set on the basis of high-quality information on actual expenditure as well as detailed monitoring of compliance with it throughout the parliamentary term. However, the spending limits have in-built flexibility for various situations, and it is possible to reallocate expenditure throughout the parliamentary term. It would be important not to lose the transparency and predictability of the spending limits system, as they are not self-evident in corresponding systems.

The Ministry of Finance has published a report on developing the steering of general government finances. The fiscal policy monitoring function considers the observations presented in the report's section on the spending limits rule to be justified. The report provides useful information on the basis of which the next Government can set its spending limits rule and level of expenditure. The report proposes that the Government Programme should formulate the escape clause in a new way. The proposed formulation of the mechanism follows the formulation of the mechanism for exceptional circumstances in the current Government's spending limits rule but seems to enable the mechanism to be used more extensively in various exceptional circumstances. In its report, the Ministry of Finance proposes that the activation of the mechanism should be proposed by the Economics Department of the Ministry of Finance and that its deployment should be decided by the Ministerial Committee on Economic Policy. The proposal of the Economics Department should specify in detail the amount, allocation and timing of the additional expenditure.

The more detailed definition of the use of the mechanism, proposed in the Ministry of Finance's report, can be considered an improvement from the current situation. During the current parliamentary term, additional expenditure enabled by various exceptions have been

defined at a very general level. This has made it very difficult for an external evaluator to comment on whether the additional expenditure enabled by the exceptions have been allocated appropriately. In the future, it is important even in exceptional circumstances to pay attention to justifying, in detail, any exception to the spending limits and the additional expenditure enabled by it.

Expenditure outside the spending limits has increased during the parliamentary term

The spending limits rule covers around 80% of the state budget expenditure, while the remaining expenditure is classified outside the spending limits. Expenditure outside the spending limits includes cyclical expenditure, such as unemployment security and social assistance expenditure. In addition, it also includes financial investments, interest payments on central government debt, and compensation to the local government for tax cuts. Some of the expenditure outside the spending limits are pass-through items, which means that the budget has allocated revenue to offset the expenditure in question. Although the spending limits rule was not in force in 2020, it was nevertheless possible in practice to monitor the change in expenditure outside the spending limits.

A number of significant exceptions have also been made to expenditure outside the spending limits during the government term. Additional expenditure has mainly been allocated to responding to the Covid-19 situation (EUR 2.638 billion in total during the government term). Expenditure outside the spending limits has also increased because of the exception related to security policy. In addition, EUR 10 billion has been budgeted in accordance with the spending limits rule as a financial investment in 2022 to prepare for supporting energy companies. Automatic stabilizers, which are sensitive to economic fluctuations, have slightly decreased from the highest expenditure level in 2020, while interest payments on central government bonds are expected to increase in 2023. Compensation to the local government for tax cuts will fall in 2023, as part of the compensations accumulated during the government term will become part of the wellbeing services counties' financing within the spending limits.

In 2023, the expenditure of Veikkaus' beneficiaries will be transferred to the scope of the spending limits in full. This was a necessary change in a situation where the expenditure of Veikkaus' beneficiaries did not fully correspond to the amount payable by Veikkaus during the government term. However, the change was implemented in violation of the spending limits rule by raising the expenditure ceiling by an amount equal to the total expenditure of Veikkaus' beneficiaries, even though part of the expenditure had already previously been transferred to the scope of the spending limits. As a result of this, the margin of manoeuvre provided by the spending limits increased by approximately EUR 228 million.

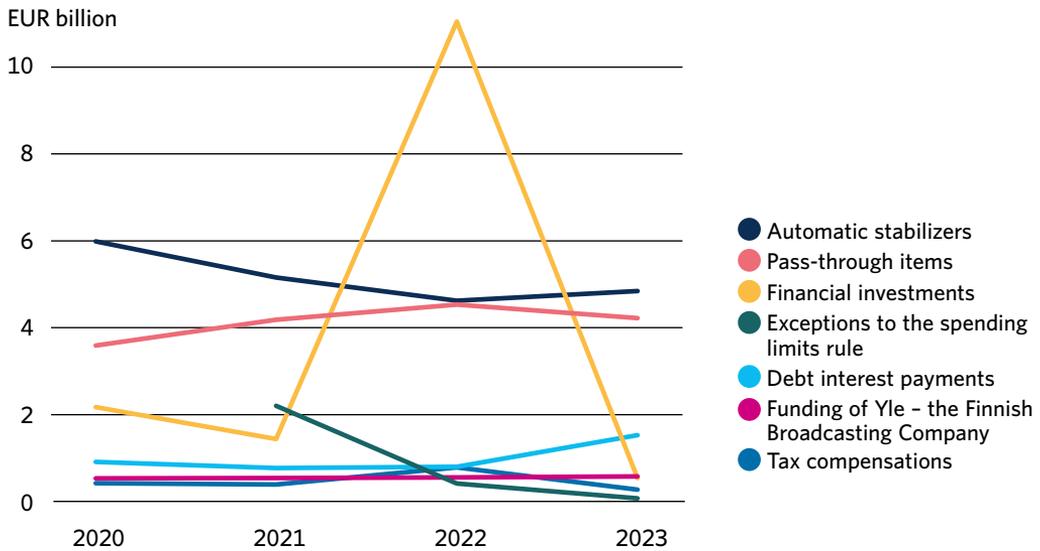


Figure 4: Expenditure budgeted outside the spending limits during the parliamentary term. Source: Ministry of Finance.

1.3 The EU’s fiscal guidance has been flexible because of the Covid-19 crisis

The fiscal policy monitoring task of the National Audit Office includes assessing Finland’s compliance with the EU fiscal framework. The Stability and Growth Pact sets the fiscal framework, which is implemented as part of the European Semester. In addition to fiscal policies, structural and employment policies are also coordinated within the framework of the European Semester. The yearly Semester begins at the end of the calendar year, when the Commission typically publishes its autumn package containing several publications, and ends in the autumn of the following year with the processing of the euro countries’ draft budgetary plans.

The normal processes of the Semester were changed due to the Covid-19 pandemic. The escape clause related to the fiscal rules of the Stability and Growth Pact was activated in spring 2020. This means that Member States are allowed to deviate from the requirements concerning public finances, provided that the deviation does not jeopardize the sustainability of public finances over the medium term. During the period the escape clause has been active, the Council’s recommendations on public finances have been qualitative rather than numerical as previously.

To remedy the economic and social damage caused by the Covid-19 pandemic, the Member States agreed on the NextGenerationEU recovery instrument and its integral part, the Recovery and Resilience Facility (RRF). The 2021 Semester was adjusted to allow for coordination with the RRF and the related reporting. In the 2022 Semester, the pre-crisis procedures have already been partly restored, but the RRF is still taken into consideration. Based on current information, the general escape clause of the Stability and Growth Pact will remain in force until the end of 2023.

In spring 2020, before the crisis resulting from the Covid-19 pandemic, the Commission opened a discussion on the assessment of the EU fiscal rules and framework. In November 2022, the Commission published its own proposal for reforming the rules. According to the proposal, the structural balance criterion, which has a key role in the current rules, would be abandoned and the focus would be on limiting the growth of general government net expenditure and ensuring debt sustainability. Member States will discuss the proposal and strive to reach agreement before the 2024 budget preparation.

EU fiscal guidance during the parliamentary term

The following is a step-by-step description of EU fiscal guidance during the parliamentary term.

Summer 2019

Based on forecasts, the Council considered that Finland would comply with the requirements of the Stability and Growth Pact in 2019 and pointed out that Finland should be ready to take further actions to ensure compliance with the requirements of the Stability and Growth Pact in 2020. The Council's fiscal recommendation for Finland for 2020 concerned limiting the growth of expenditure under the expenditure benchmark of the Stability and Growth Pact to 1.9%, which corresponded to a 0.5% adjustment of structural balance relative to GDP.

Autumn 2019

The parliamentary term changed in spring 2019. Therefore, the first stability programme of the parliamentary term was published by the Government only in autumn 2019 in connection with the draft budgetary plan for 2020. According to the normal Semester schedule, the stability programme should be published in spring, while the draft budgetary plan should be published in autumn. In the stability programme and the draft budgetary plan, Member States describe, for example, the situation with compliance with the fiscal rules.

According to the independent forecast by the Ministry of Finance, general government debt in 2020 would have remained at the level of 2019, i.e. at 58.8% of GDP. The general government deficit would have weakened somewhat to -1.4% of GDP. The figures met the debt and deficit criteria of the Stability and Growth Pact. According to the forecast, the structural balance would have weakened somewhat in 2020 from the previous year's level, i.e. to -1.4% of GDP. A significant deviation from both the structural balance criterion and the expenditure benchmark would thus have arisen in 2020, which led the Commission to ask Finland for further information and to recommend that Finland should ensure compliance with the Stability and Growth Pact. The Ministry of Finance prepared an additional report before the Commission assessed the draft budgetary plan. The fiscal policy monitoring function of the National Audit Office requested the Government to pay attention to the risk of a significant deviation from the preventive arm of the Stability and Growth Pact.

Spring 2020

The Covid-19 crisis broke out, and the Commission issued a communication on the activation of the general escape clause of the Stability and Growth Pact due to it. The Finance Ministers of Member States supported the activation of the clause. On the basis of the general escape clause, Member States can be allowed to temporarily deviate from the requirements concerning public finances, provided that this does not jeopardize the medium-term sustainability of public finances.

The Ministry of Finance's stability programme of spring 2020 was more limited than normal and technical in nature. It was forecast in it that the general government debt ratio would grow by around 10 percentage points and the deficit by around 6 percentage points in 2019–2020 due to the sudden cyclical change following the crisis and the large-scale stimulus measures. In the stability programme of spring 2020, it was stated that Finland was seeking to apply the general escape clause with regard to fiscal policy measures aimed at addressing the Covid-19 situation.

The Commission prepared a report pursuant to Article 126(3) TFEU due to the exceeding of the deficit and debt reference values of the Stability and Growth Pact. The analysis suggested that Finland would not comply with the deficit criterion in 2020, but the Commission did not propose initiating the excessive deficit procedure.

Because of the Covid-19 crisis, the Commission proposed a temporary Next Generation EU recovery instrument, an integral part of which is the Recovery and Resilience Facility (RRF).

Summer 2020

For 2020 and 2021, the Council recommended that, taking into account the general escape clause, Finland should take all necessary measures to combat the pandemic, maintain the economy, and support the recovery that had begun. The Council also recommended that, when the economic conditions allow, Finland should pursue a fiscal policy aimed at achieving a prudent fiscal position in the medium term and ensure debt sustainability while increasing investments.

Autumn 2020

The Commission announced in its Annual Sustainable Growth Strategy that the general escape clause would remain active in 2021.

In the draft budgetary plan for 2021, the Ministry of Finance estimated that the general government debt ratio would continue to grow to more than 70 per cent in 2021 and that the deficit ratio would fall somewhat to –5 per cent relative to GDP. The Commission estimated that Finland would comply with the recommendations given by the Council in summer 2020.

The 2021 Semester, which started in autumn 2020, was adjusted to allow for coordination with the RRF and the related reporting.

Spring 2021

The Commission issued the communication “One year since the outbreak of COVID-19: fiscal policy response”. In it, the Commission proposed an expansive aggregate fiscal stance that takes into account the RRF measures for 2021 and 2022. The Commission also stated that the decision to terminate or extend the application of the general escape clause should be based on an overall assessment of the state of the economy. The key quantitative criterion in this assessment should be the level of economic activity in the EU or the euro area as compared with the pre-crisis level (end of 2019).

After the exceptional year 2020, the Ministry of Finance prepared the spring 2021 stability programme as normal. The forecast for the deficit and debt criteria corresponded to the outlook of the previous autumn, which indicated non-compliance with both criteria in 2021. The Ministry of Finance assessed that Finland complied with the recommendation on public finances it was given in summer 2020. In its assessment, the Commission came to the same conclusion.

Summer 2021

The Commission prepared a report pursuant to Article 126(3) TFEU due to the exceeding of the deficit and debt reference values of the Stability and Growth Pact. The report stated that Finland complied with neither the deficit criterion nor the debt criterion. The excessive deficit procedure was not initiated.

On the basis of its economic forecast of spring 2021, the Commission considered that the conditions for the extension of the application of the general escape clause to 2022 and for its deactivation in 2023 were fulfilled.

The Council recommended Finland to maintain a supportive fiscal stance in 2022. The Council also recommended, among other things, that Finland should prioritize sustainable growth-supporting investments and, when the economic conditions allow, it should pursue a fiscal policy aimed at achieving a prudent medium-term fiscal position and ensure fiscal sustainability in the medium term.

Autumn 2021

According to the draft budgetary plan for 2022, published in autumn 2021, the Ministry of Finance forecast that the general government fiscal position would improve to -2.4% in relation to GDP in 2022 and fulfil the deficit criterion. The Ministry estimated that the exceeding of the reference value in 2020–2021 would remain temporary but not minor. The debt ratio was forecast to remain at slightly over 70% in relation to GDP in 2022, i.e. the Ministry estimated that Finland would breach the debt criterion. The Commission’s autumn forecast was in line with the Ministry’s forecast. The Commission assessed that the draft budgetary plan complied with the recommendations given in summer 2021.

In the 2022 Semester, which started in autumn 2021, the pre-crisis procedures were largely restored, but the overlaps and complementarity in the implementation of the RRF were taken into consideration.

The Commission issued the communication “The EU economy after COVID-19: implications for economic governance.” It examined the economic governance in circumstances that had changed because of the Covid-19 crisis and re-launched the public debate on the possible reform of the regulatory framework of the EU’s economic governance system.

Spring 2022

The Commission issued a communication on fiscal guidance. The communication recommended a transition from an expansionary to neutral fiscal policy in the euro area, taking into account the uncertainty in economic development caused by Russia’s war of aggression. The Commission considered that compliance with the debt adjustment rule laid down in the Stability and Growth Pact would require overly tight front-loaded fiscal adjustment in Member States, which could jeopardize growth. The Commission announced that it would not propose the initiation of new excessive deficit procedures in the spring.

In the stability programme of the spring, it was estimated that the general government deficit would remain at the level required by the 3% reference value throughout the forecast period, i.e. that Finland would comply with the deficit criterion. According to the Ministry of Finance’s independent forecast, Finland’s debt ratio continued to be on a rising path, even though its level had slightly decreased from the previous forecast. The Ministry of Finance estimated that Finland complied with the recommendations adopted by the Council in summer 2021, for example by maintaining a growth-supportive fiscal stance. The Commission concurred with the Ministry’s view.

The Commission stated that the validity of the escape clause would be extended until the end of 2023. The Commission prepared a report pursuant to Article 126(3) TFEU due to the exceeding of the debt reference value. The report stated that Finland had not complied with the debt criterion. The Commission considered that compliance with the debt adjustment rule would pose a risk to economic growth. The excessive deficit procedure was not initiated.

Summer 2022

The Council recommended Finland to maintain a neutral fiscal stance in 2023, taking into account support for the households and companies particularly affected by the energy crisis and for people who had fled from Ukraine. From 2024 onwards, the Council recommended Finland to pursue a fiscal policy that aims at a moderate general government fiscal position in the medium term.

Autumn 2022

According to the Ministry of Finance’s autumn forecast, the general government deficit will remain within the reference value in 2022 and 2023 (Table 4). The deficit criterion would therefore be complied with, and the breach of the criterion in 2020 would remain temporary.

In summer 2022, Statistics Finland introduced a new method for treating ARA loans, which affects the general government debt level starting from 2000. According to Statistics Finland, the debt ratio calculated according to the new method is 5.9 percentage

points higher than that calculated according to the old method in 2021.¹⁷ Based on the new method, the general government debt-to-GDP ratio exceeded the 60% reference value already in 2013.

The Ministry of Finance forecasts that the general government debt will be on the rise in the coming years. According to the framework of the Stability and Growth Pact, the debt ratio should, as a rule, fall if it has exceeded the reference value, but the business cycle and other relevant factors are also taken into consideration in the assessment. Exceeding the limit values may lead to the initiation of an excessive deficit procedure (EDP). However, during the validity of the escape clause, the Commission has not initiated a new EDP procedure for any Member State.

In the draft budgetary plan for 2023, the Ministry of Finance proposed that Finland should comply with the recommendations given by the Council in summer 2022. The Commission concurred with this view. The fiscal policy monitoring function stresses the importance of stabilizing the government debt-to-GDP ratio.

Table 4: General government deficit and debt. Sources: Statistics Finland; the forecast of the Ministry of Finance (autumn 2022) is marked with an asterisk.

Deficit/debt	2019	2020	2021	2022*	2023*	2024*
General government deficit	-0.9	-5.5	-2.7	-1.4	-2.2	-2.2
General government debt	64.9	74.8	72.3	71.2	72.7	74.1

The preventive arm of the Stability and Growth Pact examines the achievement of or progress towards the country-specific medium-term objective (MTO) through the calculation of structural balance and the expenditure benchmark. Finland's MTO is a structural balance of -0.5% relative to GDP. During the validity of the escape clause, since spring 2020, no numerical fiscal recommendations (i.e. requirements for the development of structural balance and expenditure under the expenditure benchmark) have been set for Member States.

Figure 5 shows, however, the annual change in the structural balance by assessing the business cycle based on two different methods. The annual change is a key observation: if the MTO has not been achieved, the framework addresses the change in the structural balance towards the MTO. In the first method, the business cycle assessment used in the structural balance calculation is based on the output gap, calculated using the production function method jointly agreed by Member States. In the second method, the business cycle is illustrated by the composite indicator produced by the heatmap of the fiscal policy monitoring function. The autumn 2022 forecast of the Ministry of Finance and the most recent statistics have also been used in both calculations.

The estimates of annual change in structural balance provided by the two methods are clearly different for the years 2021 and 2023. Based on the composite indicator, the structural balance weakens in 2021, whereas based on the output gap, it strengthens. In 2023, the situation is the opposite.

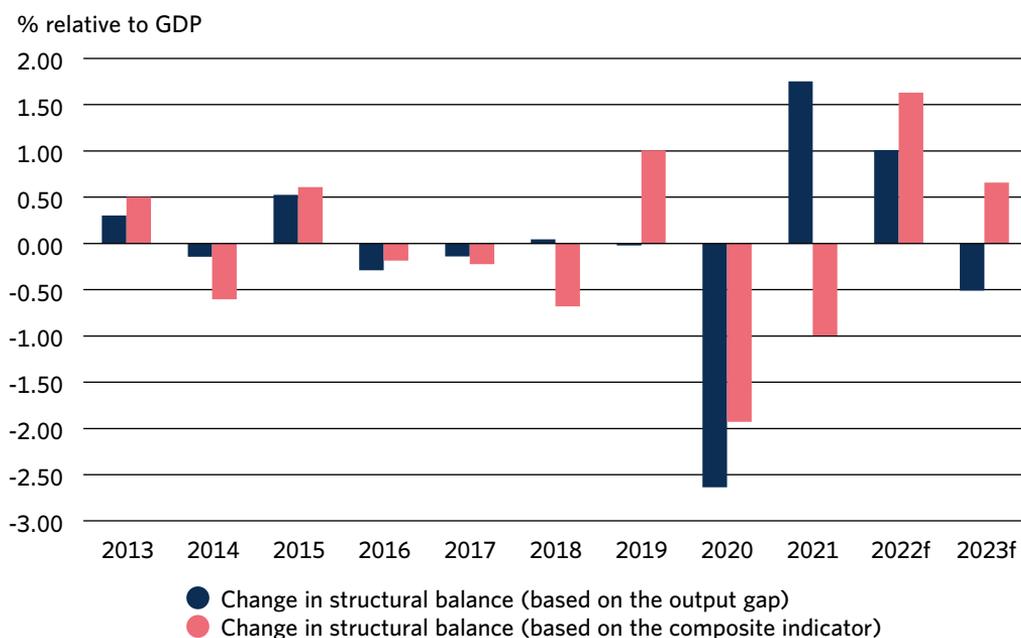


Figure 5: Change in structural balance. Sources: Ministry of Finance, calculations by the fiscal policy monitoring function.

The reform of the EU rules was resumed after the Covid-19 pandemic

In spring 2020, before the crisis caused by the Covid-19 pandemic, the Commission opened a discussion on the assessment of the EU fiscal rules and framework. However, due to the exceptional circumstances, the development of the rules was put on hold. The discussion was restarted in autumn 2021, when the Commission launched an open questionnaire on the need for a reform.

In November 2022, the Commission published its own proposal for the reform of the rules. According to the Commission’s proposal, the new framework would focus on Member States’ debt sustainability and four-year plans, which would limit the growth of public expenditure. The time span in the EU’s economic governance would change from an annual review to an assessment of medium-term development of debt and expenditure. Member States will discuss the proposal and aim to reach agreement before their 2024 budget preparation.

According to the Commission’s proposal, the structural deficit objective, which has a key role in the current rules, would be abandoned. The structural balance objective is difficult to understand and based on an unobservable output gap estimate. The output gap estimate may be revised to a significant extent afterwards, especially when there are cyclical changes. Thus, the conclusion about the achievement of the structural fiscal position objective, i.e. about compliance with the rule, may therefore also be revised to a significant extent.

The 3% reference value for deficit and the 60% reference value for government debt relative to GDP, as specified in the Treaty, remain unchanged in the Commission’s proposal. However, the Commission proposes to abandon the 1/20 rule for debt adjustment, i.e. the requirement for an approximately 5% annual adjustment. Before the Covid-19 crisis,

Member States already had debt ratios significantly higher than the 60% debt criterion, and the crisis has further increased the debt ratios. The debt adjustment rule towards the 60% objective, as set out in Stability and Growth Pact, is in practice unrealistic for some Member States. The Commission has assessed that a strong front-loaded adjustment required by the rule could jeopardize the conditions for growth. Based on the Ministry of Finance's autumn 2022 forecast, the fiscal policy monitoring function estimates that compliance with the debt reduction rule according to the forward-looking criterion would mean strengthening public finances in Finland by more than EUR 9 billion (at the 2023 level) by 2026 compared with the forecast if the rules of the Stability and Growth Pact were reinstated in 2024.

On the basis of the Commission's proposal, the debt-to-GDP ratio should be brought credibly to a downward path during the four-year plan. In addition, it would be possible to apply for an extension of three years on the basis of green investments and structural reforms boosting economic growth. The adjustment would be steered by a debt sustainability analysis, the purpose of which is to define a manageable debt level and the expenditure and revenue development leading to it specifically for each Member State. The plan would involve monitoring the general government net expenditure, i.e. a concept of expenditure that is unaffected by interest payments and cyclical unemployment expenditure but that takes into account the impact of discretionary changes in revenue.

Country-specific debt ratio or debt reduction targets have also been raised among expert bodies and in the responses to the Commission's questionnaire launched in autumn 2021. A multiannual limit for general government expenditure has been proposed as an operational instrument in accordance with the Commission's proposal. Before the outbreak of the Covid-19 pandemic, the European Fiscal Board (EFB) proposed focusing on the expenditure benchmark to reduce the debt ratios.¹⁸

The Network of Independent EU Fiscal Institutions (IFIs) has also published a review on the development of EU fiscal governance.¹⁹ According to the review, the framework suffers from the following main problems: excessive complexity, weak compliance, and pro-cyclicality (i.e. their tendency to strengthen the business cycle). The review attaches importance to clear rules that promote debt sustainability and emphasizes, in line with other actors, strengthening the role of national IFIs. According to the Commission's proposal, IFIs would be responsible for assessing the underlying assumptions and suitability of the adjustment plan from the perspective of debt sustainability, as well as compliance with the plan.

2 Cyclical developments, fiscal stance, and the realism of economic forecasts

The cyclical fluctuations during the parliamentary term have been exceptionally large compared to the previous parliamentary terms. The economy contracted sharply in 2020 as a result of the Covid-19 crisis but recovered rapidly. The economic activity was at a high level since the early summer of 2021, until the war and the energy crisis halted the positive trend in the summer of 2022, and the business cycle began to deteriorate.

Rapid cyclical fluctuations have made it more difficult to adjust the fiscal stance to the business cycle. The fiscal policy monitoring function assesses that the Government's fiscal policy supported the economy and society in a timely manner and on a sufficiently large scale at the outbreak of the Covid-19 pandemic in 2020. Furthermore, the additional expenditure which resulted from Russia's war of aggression and the ensuing energy crisis in 2022 and which were considerable in terms of fiscal policy was considered to be justified. However, the fiscal policy stance remained too loose after the Covid-19 pandemic, which has contributed to the unnecessary heating of the economy and to intensifying the business cycle. The business cycle would thus have justified a tighter expenditure and income policy after 2020.

The great uncertainty about the duration and depth of the crises and the rapid cyclical fluctuations have made forecasting the economy exceptionally difficult during the current parliamentary term. The fiscal policy monitoring function assesses that the forecasts of the Ministry of Finance, on which the annual budget and the General Government Fiscal Plan are based, have nevertheless been realistic overall. The latest forecast, on which the 2023 budget proposal is based, is also realistic within the meaning of the EU framework.

2.1 Cyclical fluctuations have been exceptionally strong during the parliamentary term 2019–2023

Russia's war of aggression in Ukraine, the resulting economic sanctions imposed on Russia, and the ensuing energy crisis in Europe have halted Finland's favourable economic development. Cyclical developments can be monitored by means of the business cycle heatmap produced by the fiscal policy monitoring function (see the information box on page 41). The heatmap can be used to assess whether the Government has succeeded in pursuing counter-cyclical fiscal policy. The map provides almost real-time information on the business cycle, providing decision-makers with information to support the implementation of symmetric counter-cyclical fiscal policy.

A clearly blue colour code, representing a slowdown in economic growth, appeared in the business cycle heatmap in March 2022 for the first time since the recovery of the economy started in March–April 2021 (Figure 6). Russia's war of aggression began then

to have a strong impact on consumer confidence. Consumer confidence is often more sensitive and faster to react to cyclical changes than other variables. Since March 2022, the heatmap has reflected a gradually cooling business cycle: the blue colour code has spread and intensified, while the red colour code has faded. Almost all indicators describing economic confidence and also some indicators related to the real economy and the labour market indicate weakening of the business cycle.

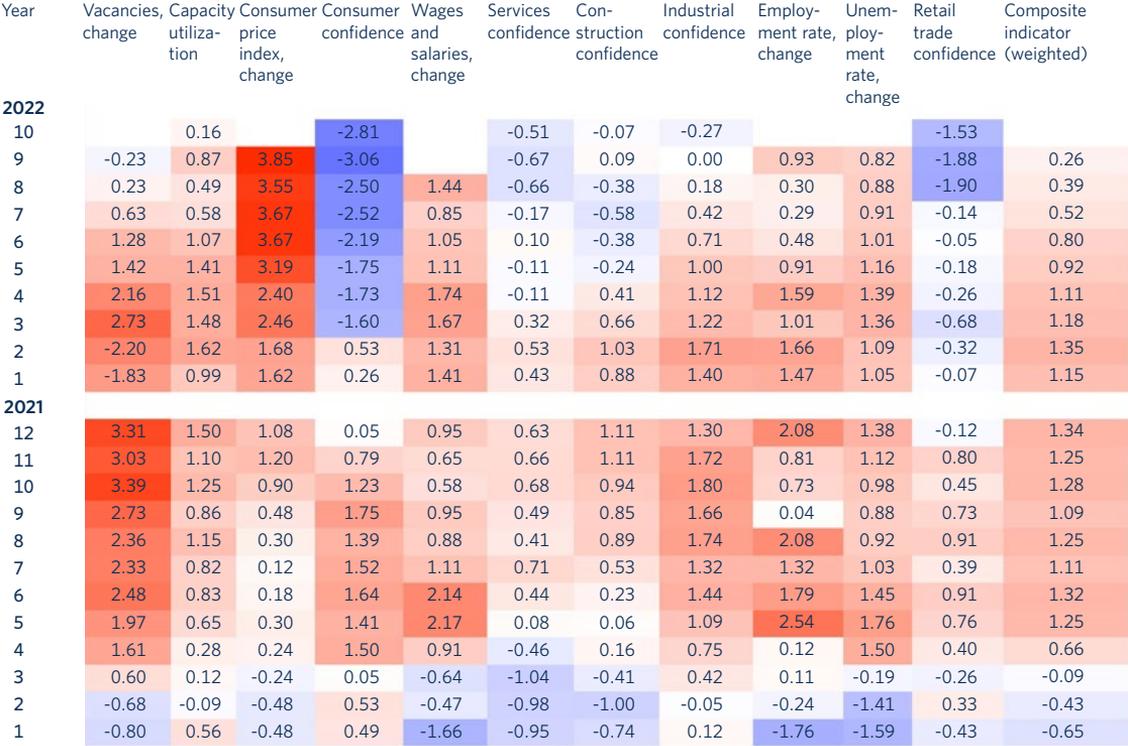


Figure 6: Heatmap produced by the fiscal policy monitoring function (28 October 2022).
 Source: Statistics Finland, Ministry of Economic Affairs and Employment, European Commission, Confederation of Finnish Industries, and calculations by the fiscal policy monitoring function.²⁰

Unlike other indicators, the annual change in the consumer price index is richly red. Inflation began to accelerate already in 2021, when the pent-up consumer demand met with bottlenecks in supply. In February 2022, the Russian invasion in Ukraine and the resulting energy crisis accelerated price increases. High inflation, in turn, has a negative impact on consumer confidence, for example. It is likely that the consumer price index will continue to develop in a different direction than the other variables in the heatmap.

Based on the fluctuations of the colour codes in the heatmap, cyclical fluctuations have been exceptionally strong and rapid throughout the current parliamentary term. The economy contracted sharply in 2020 as a result of the Covid-19 crisis. This turned the heatmap dark blue at a stroke. In April 2021, the heatmap turned mainly red for the first

time after the outbreak of the pandemic, i.e. the economy was recovering. The economic recovery was rapid, and from the early summer of 2021 to the beginning of the Russian invasion in Ukraine, the heatmap indicated a very high economic activity. The war and the energy crisis halted the positive trend again in the summer of 2022.

Business cycle heatmap produced by the fiscal policy monitoring function

The business cycle heatmap is a tool that describes the business cycle in Finland by means of colour codes, based on indicators illustrating the state of the Finnish economy. The indicators have been selected on the basis that, historically, they have illustrated cyclical fluctuations accurately, monthly data is available on them, and they are linked to the development of GDP.

The colour of the heatmap changes according to the change in the indicator values. Red represents a situation where, based on the indicator in question, the economy is growing faster than average, e.g. the employment rate is improving, and salaries are rising. Accordingly, blue represents a slowdown in economic growth. The higher the share of red indicators at the same time, the more likely it is that the economy is experiencing good times. A large share of blue indicators, on the other hand, indicates bad times in the economy.

A composite indicator whose value is calculated from the heatmap variables has also been compiled of the individual business cycle indicators. The timing of the composite indicator and the fact that it is revised over time only to a minor degree make it a good additional tool for measuring the business cycle, alongside the output gap (see Strifler, M. and Kokkinen, A., 2021a²¹).

The exceptionally strong cyclical fluctuations during the 2019–2022 parliamentary term are also evident when the term is compared with the previous parliamentary terms (see Figure 7). In other words, there have been more rapid downturns and upturns than in the previous parliamentary terms.

There was, of course, a difficult financial crisis in the parliamentary term 2007–2011 but, from the perspective of business cycle observations, the development at the time was clear: recession and subsequent recovery. The parliamentary term 2011–2015 also had its own challenges: Economic forecasters expected Finland to recover simultaneously with the rest of Europe, but this did not happen. The weakening of Nokia's mobile phone sales and ultimately the sale of its mobile phone operations to Microsoft in 2013, as well as the outsourcing of factories from Finland, continued by the paper industry, led to a situation where Finnish exports did not develop in line with world trade and the economic development in the main export markets. Finland lost market shares in exports, and its cost competitiveness was weak.²² In these years, the composite indicator of the heatmap dropped below zero for a long time, which reflects the long period of low or negative economic growth of the Finnish economy.

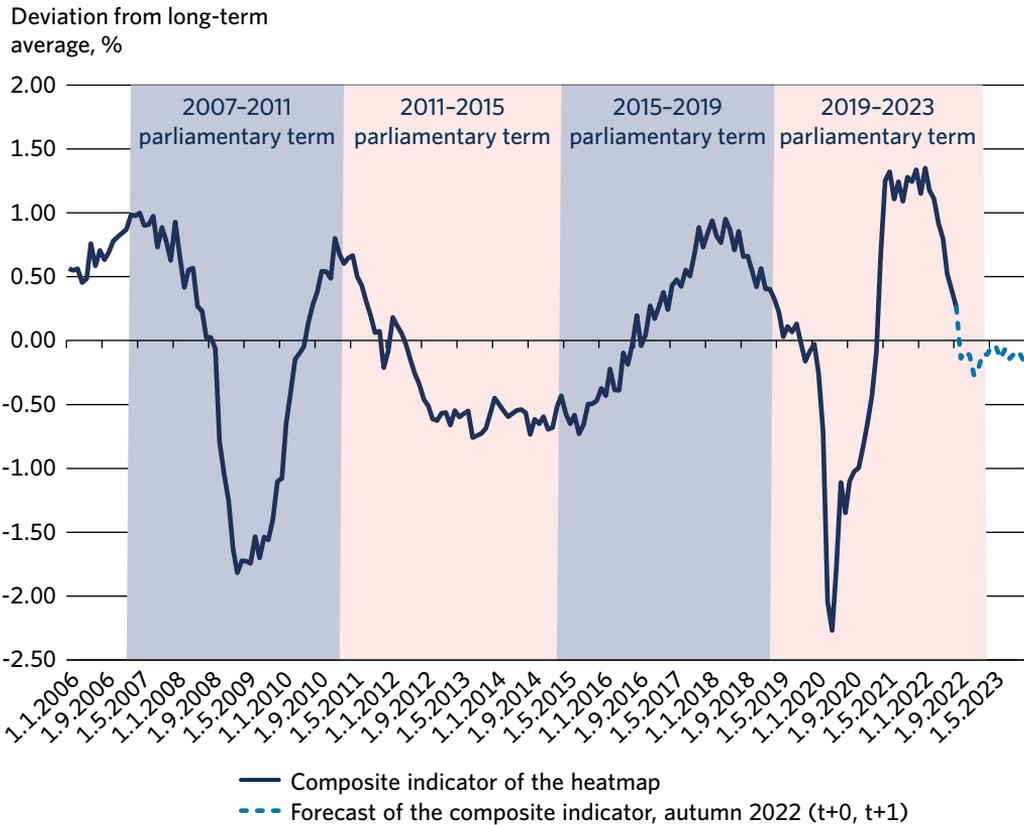


Figure 7: Monthly composite indicator and forecast for the current and next year (green dashed line). The forecast is based on the heatmap data and other statistics available by 28 October 2022. Source: Statistics Finland, Ministry of Economic Affairs and Employment, Confederation of Finnish Industries, European Commission. Calculations and forecasts: fiscal policy monitoring function.²³

During the following parliamentary term, in 2015–2019, the Finnish economy managed to join the growth of the global economy long after the rest of Europe. Cost competitiveness improved²⁴, the labour market recovered, and the growth continued until the end of the parliamentary term, albeit at least partly driven by the positive development of the global economy. According to the composite indicator, however, cyclical fluctuations were quite clear and slower in the 2011–2015 and 2015–2019 parliamentary terms.

The picture of the current parliamentary term looks very different. The Covid-19 virus, the lockdown measures, and uncertainty brought the Finnish economy to a sudden stop in spring 2020. The coping of society and protecting citizens against the virus required considerable fiscal support measures. The worldwide spread of the virus caused breaks in global production chains.

Therefore, national economies, including Finland, suffered from supply disturbances. Bottlenecks in supply and pent-up consumer demand resulting from restrictions on human mobility since the year of the pandemic, and the global fiscal stimulus, which continued simultaneously, seem to have contributed to the rapid recovery and even overheat-

ing of national economies and the Finnish economy. They also contributed to the rise of inflation beyond the central banks' 2% target already in late 2021, reaching over 3.5% in November–December 2021 and 4.4% in January 2022.

After the previous year, which ended with strong growth, the Russian invasion in Ukraine at the end of February 2022 prompted renewed concern about a recession and a need to invest in defence and border security even in Finland. When the war broke out, forecasters assessed that the economic outlook for 2022 had deteriorated considerably. Russia also reduced and eventually ended its supply of energy, using this increasingly clearly as a weapon against the EU countries. The energy crisis following the energy war, together with the above-mentioned bottlenecks in supply, caused inflation to rise in 2022 to new, remarkably high figures, resembling those of the 1970s. The upturn in Finland was brought to a sudden stop in summer 2022. The strong fluctuations and the special nature of the crises have complicated determining the fiscal stance in relation to the business cycle (see below) and the targeting of fiscal measures.

Figure 7 also shows the forecast for the remaining months of the current year and for 2023 (Strifler, M. and Kokkinen, A. 2021b²⁵). According to the forecast, the war and the energy crisis will have a negative impact on the economy in the near future. The rapid deterioration of the business cycle after summer 2022 is forecast to continue for the rest of the year, and the composite indicator is expected to fall below the neutral business cycle. In 2023, the business cycle is forecast to develop poorly and to remain below zero. According to the forecast, there will be no rapid recovery. According to the analysis of the realism of forecasts (see section 2.3), the consensus forecast of GDP growth in Finland in 2023 developed poorly during the summer and early autumn, remaining at about zero growth and thus below Finland's long-term growth. This is in line with the forecast path of the monthly composite indicator. It should be noted that all forecasts, including the forecast of the composite indicator of the heatmap, currently involve an exceptionally high level of uncertainty.

Forecast of the business cycle heatmap produced by the fiscal policy monitoring function

The forecast of the heatmap produced by the fiscal policy monitoring function is strongly based on forecasts of other actors, such as the Ministry of Finance, the Finnish Centre for Pensions, and Trading Economics. In this way, the fiscal policy monitoring function aims to ensure that its forecast utilizes these other forecasters' expertise as widely as possible. This makes the forecast as neutral as possible.

The forecast process is, in brief, as follows²⁶:

A monthly forecast is produced for each single indicator of the heatmap for the remaining months of the current year and the months of the following year. Based on them, a forecast is calculated for the heatmap's composite indicator.

In practice, the forecasts of other actors are utilized in the heatmap forecast in such a manner that their annual forecasts are adjusted to the remaining months of the current year and the months of the following year. How the indicator develops during the year depends thus on the modelling choices made by the fiscal policy monitoring function, but, on the annual level, the forecast corresponds exactly to that of the external forecaster.

In addition, the development projected by the euro area indicators is applied to corresponding Finnish indicators. In this methodological framework, too, the forecasts of individual indicators depend on the modelling choices made by the fiscal policy monitoring function. However, the most important part in the preparation of the forecasts of the Finnish indicators is played by the external euro area forecast.

These methods were applied to prepare forecasts for nine heatmap variables with a combined weight of 0.88. The fiscal policy monitoring function prepared forecasts independently of the forecasts of other actors for only two variables; these were calculated by statistical time series analysis (combined weight 0.12).

The forecast is based on the heatmap data and other specified statistics available by 28 October 2022.

The composite indicator of the heatmap and its forecast complement the picture of the business cycle based on the EU's common output gap method. Figure 8 shows that the composite indicator of the heatmap and the output gap estimate develop largely in line with each other until 2020. As for 2021, the pictures of the cyclical development produced by the two methods differ from each other. The composite indicator indicates rapid recovery of the economy, whereas according to the production function method, the economy was still below the potential output in 2021. The production function method has been found to lead to a significant revision of the business cycle afterwards. For example, the output gap estimate for 2021 has already been revised significantly upwards but remains nevertheless negative.

The abnormal baseline in 2021 is reflected in the forecasts of both indicators. According to the composite indicator forecast, the economy will still be clearly above the long-term average in 2022, whereas according to the output gap estimate, it will still be below the estimated potential output. However, in autumn 2022, both forecasts project that the post-Covid upturn will be over in 2021–2022 and that the business cycle will deteriorate in 2023 as a result of the war and energy crisis.

In spring 2022, the forecast based on the output gap deviated from the forecast of the composite indicator even in this respect. According to the spring 2022 forecast of the composite indicator, the economy was cooling in 2022–2023, while the forecast based on the output gap projected an upturn. The forecast paths for 2022–2023 thus differed from each other in spring 2022. In autumn 2022, the forecast based on the output gap has adopted the same trend as the forecast of the composite indicator has had since spring 2022.

%, Output gap relative to estimated potential output,
Composite indicator relative to long-term average

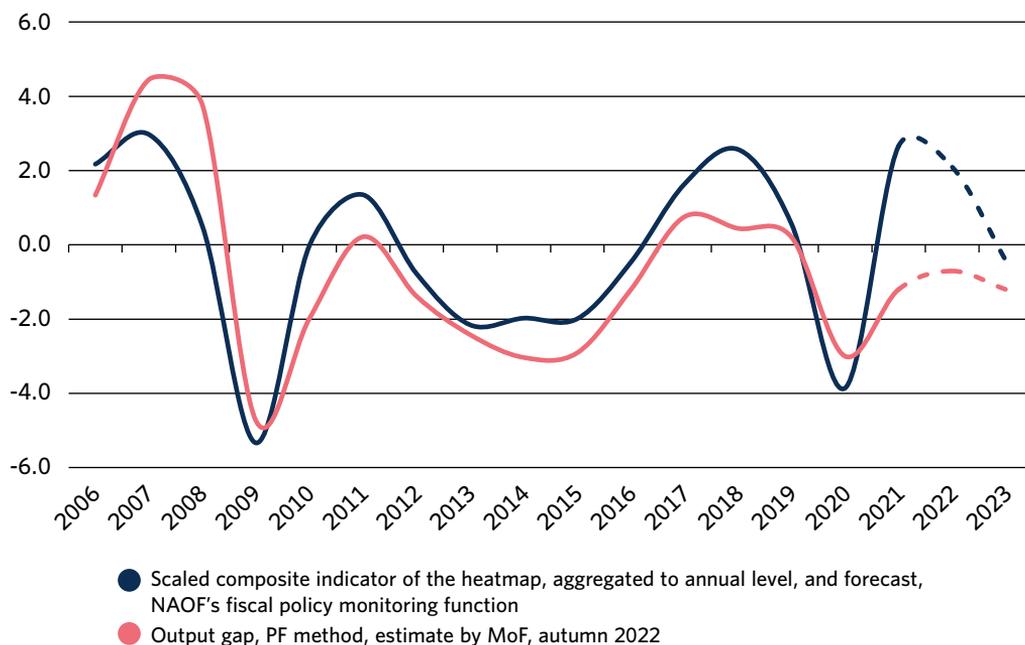


Figure 8: Composite indicator of the heatmap and its forecast, and the output gap estimate of the Ministry of Finance. Forecast for 2022 and 2023 (dashed line). The variation (standard deviation) of the business cycle indicator of the heatmap has been scaled to be comparable with the variation (standard deviation) of the output gap. Source: Output gap: MoF; Business cycle indicator of the heatmap: Statistics Finland, Ministry of Economic Affairs and Employment, European Commission, Confederation of Finnish Industries, and calculations by the fiscal policy monitoring function.²⁷

All forecasts currently involve a high level of uncertainty due to the war, energy crisis, and high inflation. This also applies to the forecasts of the composite indicator of the heatmap and the output gap in Figure 8. The differences between the methods, both as regards the upcoming economic development and the business cycle in 2021, are reflected in the conclusions on fiscal stance (section 2.2) and on compliance with the objectives set by the fiscal framework (section 1.3).

Figure 7 above illustrates the rapid cyclical changes in the current parliamentary term. One of the factors that hampered responding to the rapidly improved business cycle is the fact that the state budget for 2021 was decided already in the autumn of 2020, when there was little information available on the development of the Covid-10 crisis and the nature of the downturn. On the other hand, new recovery and/or savings decisions have been made in the middle of the year both in the first Covid-19 spring and in previous times of recession. However, it has proved to be considerably more difficult to make savings decisions, for example in the state budget and supplementary budget process, in order to build fiscal buffers during an economic upturn. (see section 2.2).

The composite indicator of the heatmap is supported by other business cycle indicators

The heatmap and its composite indicator aim to measure the business cycle directly. The output gap, in turn, is calculated as the difference between the observed GDP and the estimated trend or potential output. It should be noted that, as an initially unobservable component, potential or a trend can be calculated in countless different ways. In Figure 8, a trend has been calculated for quarterly GDP by means of the traditional Hodrick-Prescott filter to enable comparison. In addition, it is natural to examine when GDP has returned to the pre-crisis level.

Figure 8 illustrates (a) how the output level of the second quarter of 2019 was achieved in the second quarter of 2021 and (b) how the GDP trend according to the Hodrick-Prescott filter (HP trend) was achieved between the second and third quarter of 2021. On the basis of both of these examinations, Finland's economy recovered rapidly after the Covid-19 spring of 2020. The output gap of the HP filter, calculated as the difference between the observed GDP and the HP filter trend, was negative from the Covid-19 spring until the turn of the second and third quarter of 2021. After that, the output gap based on the HP filter has been positive. This is in line with the picture provided by the composite indicator of the heatmap on the cyclical fluctuations in 2021 and 2022.

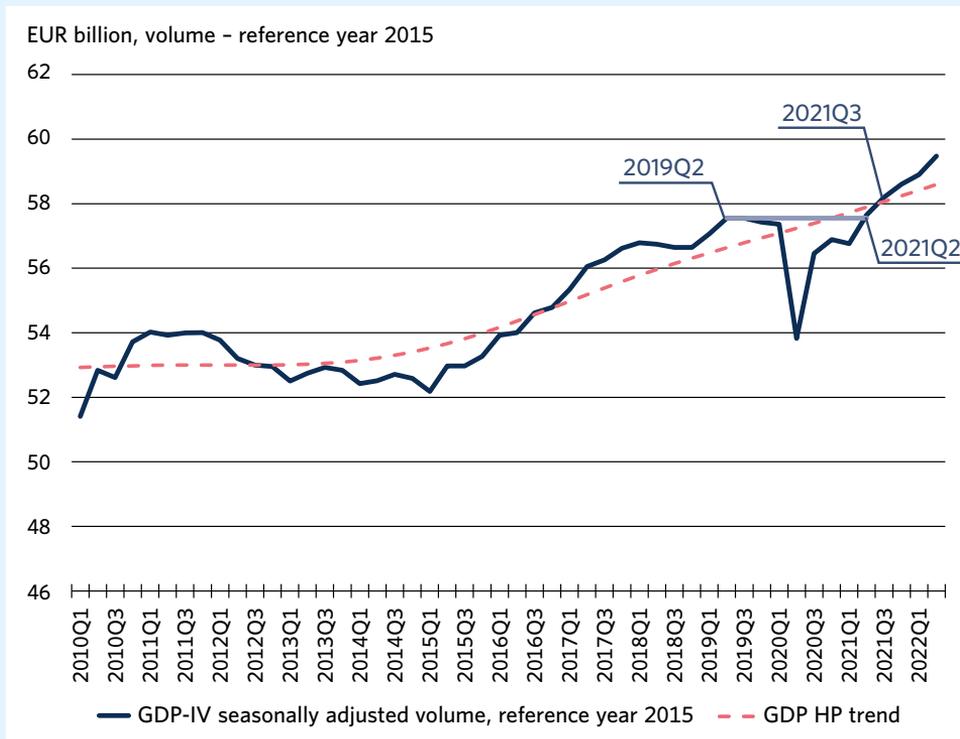


Figure 9: The seasonally adjusted quarterly volume of GDP and the Hodrick-Prescott trend. Sources: Statistics Finland, National Accounts, calculations of the fiscal policy monitoring function.

In addition, according to the forecast published by the Bank of Finland in summer 2022, the output gap almost closed in 2021 and will turn positive in 2022.²⁸ According to the International Monetary Fund's (IMF) autumn 2022 forecast, the output gap will turn positive in 2022 and fall back into negative territory in 2023.²⁹

Similar results have been presented in recent research papers. In these studies, calculations have been carried out quarterly or biannually, which makes it possible to measure cyclical fluctuations more accurately, in the same way as in the composite indicator of the heatmap. In their research paper, Sariola and Pönkä (2021)³⁰ present an output gap calculation based on the main component analysis, and the results are similar to those of the composite indicator of the heatmap. According to the calculation updated in autumn 2022, the output gap turned positive in the second half of 2021. Orjasniemi and Kuusela (2021)³¹ present another empirical approach in their research paper, using a multidimensional filter to calculate the output gap. According to their calculations, the output gap turned positive in 2021. Gäddnäs³² has examined output gaps produced using different values of the HP filter parameter (see Appendix 2). The use of different parameter values is related to the requirement set by the time series analysis to take the individual characteristics of a time series into account by examining it for instance by means of a spectral analysis.³³ The examination shows that the timing of the output gap based on the HP filter and Finland's GDP data for 2019–2022 has been fairly stable in sensitivity analyses, and calculations show that the output gap turned positive in 2021 as well.

However, a factor that complicates real-time observation according to Figure 9 is that the GDP trend produced by the Hodrick–Prescott method for 2019–2021, as shown in the figure, can only be calculated reliably when statistical observations are available for 2021–2022 (or preferably even further). The heatmap of the fiscal policy monitoring function has been developed specifically to facilitate almost real-time observation of cyclical fluctuations.

2.2 Fiscal policy responded successfully to Covid-19 – after that the fiscal stance remained unnecessarily loose

The fiscal policy monitoring function assesses the orientation of fiscal policy by means of both fiscal stance and fiscal impulse. The fiscal stance is measured by means of cyclically adjusted structural primary balance in relation to the business cycle. The fiscal impulse, in turn, is measured by means of the change in structural primary balance in relation to the change in the business cycle. The European Fiscal Board uses the same methods when assessing the orientation of fiscal policy in the euro area.

The Government has responded rapidly with timely and sufficiently large-scale decisions to both the crisis following the outbreak of the Covid-19 pandemic in March 2020 and the needs for defence and border surveillance preparedness following the Russian invasion of Ukraine in late February 2022. However, the fiscal stance has remained loose towards the end of the parliamentary term. In retrospect, the Government should have taken the rapid recovery of the economy from the Covid-19 crisis in late 2021 and early 2022 into account and pursued tighter fiscal policy with timely decisions.

The cyclical fluctuations have been exceptionally intense during the 2019–2022 parliamentary term, which has made it more difficult than in the previous parliamentary terms to pursue countercyclical fiscal policy. At the beginning of the parliamentary term, in 2019, the business cycle was still positive, although economic growth began to slow down at the end of 2019. The situation turned from positive to negative in early 2020, when the new Covid-19 virus spread to Finland as well. In mid-March, Finland, too, had to react to the spread of the virus with economic lockdown measures.

Due to both domestic and foreign support and stimulus measures, for example, the pre-crisis GDP level was achieved in Finland in the second quarter of 2021. Based on the available data, good economic growth appears to have continued at least until mid-2022, despite the Russian invasion of Ukraine. After the start of the invasion in spring 2022, forecasters dropped their GDP growth forecasts for the year from around 3% to 1.5%.

However, based on the data published on the first two quarters of the current year, the development in the first half of the year seems to have surpassed the spring forecasts. If the GDP of the third and fourth quarter remained at the now estimated level of the second quarter, the full-year GDP growth would amount to around 2.6%. During the autumn, forecasters have adjusted their forecasts for 2022 to around 2%, taking into account the estimated negative growth in the last two quarters of the year.

According to the forecasts, the annual economic growth will decline in 2023. The forecasts for 2023 published in autumn 2022 are, as a rule, close to zero and mostly slightly below zero. Several forecasters expect economic growth to turn slightly negative.

Russia's war of aggression and the energy crisis seem to turn the economy into a recession. The war has prompted Finland to prepare in 2022 for the arrival of refugees from Ukraine as well as for increased border security and preventive defence needs. The war also caused Finland and Sweden to submit NATO membership applications at the same time this year.

The additional public expenditure on defence and border security in 2022 can be considered justified. However, as the economic situation had turned positive in mid-2021, the general government as a whole should have refrained from providing a stimulus at this stage. Examinations of the fiscal policies of the EU countries have shown that it was, in fact, quite easy to launch a massive fiscal stimulus during the Covid-19 crisis. It has proved to be considerably more difficult to stop providing the stimulus and to adopt a contractionary fiscal policy once the economy has recovered.³⁴ If stimulus continues to be provided too long, this may heat the economy pro-cyclically. This may also make it difficult to stimulate the economy more in the event of new crisis. A third important aspect at the moment is that a contractionary monetary policy aimed at bringing down inflation requires that fiscal policy should not work contrary to this objective.³⁵

During the current parliamentary term, the fiscal policy monitoring function has stated in its reports that the fiscal policy pursued by the Government stimulated the national economy appropriately in 2020, the year of Covid-19. In addition, the fiscal policy monitoring function stated already in spring 2021 that the economy had recovered rapidly from the slump caused by Covid-19 and warned the Government of the risk of pro-cyclical fiscal policy.

In its spring 2021 assessment of the management of general government finances, the fiscal policy monitoring function stated that, on the basis of the data of the business cycle heatmap, the economic development appeared to have turned positive in the second

quarter of 2021. It was stated in the report that if this development continued to be strong throughout the year, Finland should move towards a more contractionary fiscal policy. Cyclical fluctuations have been intense in Finland, and fiscal policy can offset them only by counter-cyclical measures.

In its autumn 2021 report to Parliament, the fiscal policy monitoring function reiterated that the economy seemed to be growing rapidly in 2021 and that the frame for fiscal policy was left flexible. It was stated to be possible that the Government's discretionary stimulus measures had accelerated economic development pro-cyclically in 2021 when the economy was taking an upturn. The report warned that a pro-cyclical fiscal policy might intensify cyclical fluctuations and pose the risk of overheating the economy.

However, the autumn report to Parliament stated that the appropriateness of the fiscal policy stance of 2021 in relation to the business cycle remained to be definitively assessed ex post. This would depend significantly on whether the recent rise in inflation would remain short-lived or become a longer-term problem. The composite indicator of the heatmap produced by the fiscal policy monitoring function signalled already then the risk of a pro-cyclical stimulus and cyclical intensification, bottlenecks in production, overdemand for labour, and inflation. The report warned that during an economic upturn, a pro-cyclically stimulating fiscal policy did not contribute to the building of fiscal buffers for a downturn. However, in the fiscal policy monitoring report of autumn 2021, the pro-cyclical stimulus measures were considered justified in order to ensure that post-pandemic stimulus measures would not be brought to an end too soon. Expansionary fiscal policy had also been agreed in EU-level cooperation.

In retrospect, it was justified to be concerned about pro-cyclical fiscal policy in 2021. Fiscal policy continued to be expansionary too long after the Covid-19 crisis both in Finland and outside it (in the USA, China, and the EU). Together with the disruptions in supply, this seems to have contributed to the heating of the economy and to inflation exceeding the central banks' 2% target as early as in autumn 2021. The Russian invasion of Ukraine in spring 2022 and the resulting energy crisis increased inflation to the figures last seen in the 1970s. The prolongation of inflation is currently being prevented by increases in central banks' interest rates, which, together with the war and the energy crisis, can cool economies even into recession. Instead of decreasing, cyclical fluctuations thus seem to have increased. Textbooks of macroeconomics warn against such pro-cyclical development.³⁶

Fiscal stance and fiscal impulse

During this parliamentary term, the fiscal policy monitoring function has adopted a new approach to examining the orientation of fiscal policy: it is assessed by means of both fiscal stance and fiscal impulse.

The fiscal stance is measured by means of cyclically adjusted structural primary balance in relation to the business cycle. The fiscal impulse, in turn, is measured by means of the change in the structural primary balance in relation to the change in the business cycle. This approach corresponds to the method that the European Fiscal Board uses to assess the orientation of fiscal policy³⁷.

Fiscal stance and fiscal impulse are concepts that describe the orientation of fiscal policy in relation to the business cycle in 2019, 2020, 2021 and 2022 comprehensively. After 2019, the structural primary balance turned considerably more negative due to the strong fiscal stimulus. Even if the fiscal impulse, or change, were contractionary in 2022, the fiscal stance would remain expansionary.

Based on the fiscal stance, fiscal policy has been expansionary since the Covid-19 crisis

Figure 10 illustrates the cyclically adjusted structural primary balance in relation to the business cycle. This analysis describes whether the Government's discretionary fiscal policy has functioned counter-cyclically, smoothing cyclical fluctuations. Nominal primary balance refers to balance relative to GDP, net of interest payments. The cyclically adjusted structural primary balance illustrated in the figure is obtained when the impact of the business cycle and one-off factors are eliminated from the nominal primary balance relative to GDP.

The official cyclical adjustment of the primary balance is performed using the production function method jointly agreed by the EU Member States and the output gap based on it. Especially in the case of small open economies, such as Finland, real-time output gap estimates of the business cycle have been revised considerably afterwards. For this reason, the fiscal policy monitoring function assesses the fiscal policy stance by means of both the output gap and the composite indicator of the business cycle heatmap produced by the team.

The vertical axis of Figure 10 illustrates the discretionary fiscal stance in 2019–2022 based on the structural primary balance. The primary balance has been cyclically adjusted by means of both the output gap (red dots in the direction of the horizontal axis) and the composite indicator of the heatmap (black dots in the direction of the horizontal axis). Based on the data available in autumn 2022, the structural primary balance has been negative in 2019–2022 according to both cyclical adjustments (in other words, both the red and the black dots are negative in the direction of the vertical axis).

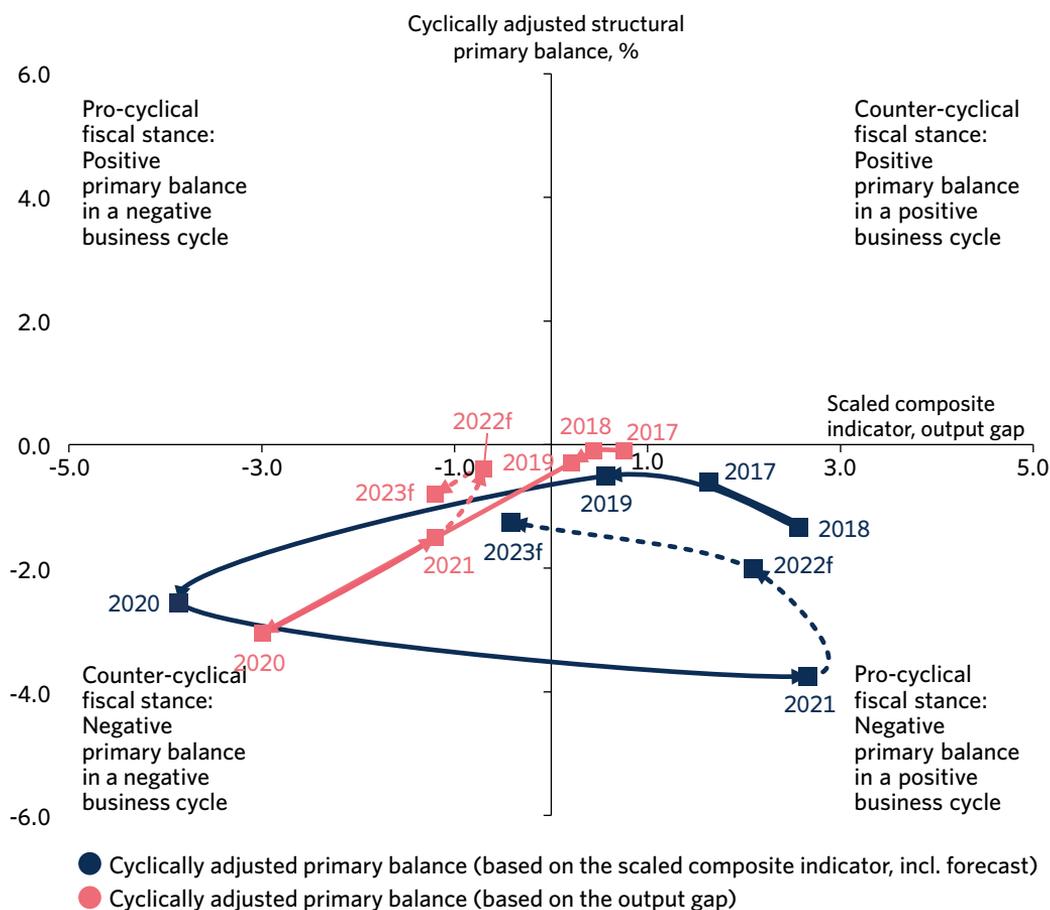


Figure 10: Fiscal stance in relation to the business cycle: structural primary balance based on the output gap and the business cycle indicator of the heatmap in relation to the business cycle based on the output gap and the business cycle indicator of the heatmap in 2017-2023.³⁸ The estimates for 2022 and 2023 are based on forecasts. Source: Ministry of Finance and the fiscal policy monitoring function.

However, there are differences in the depth of the negative structural balance. For the years 2021 and 2022, the structural primary balance based on the composite heatmap indicator appears to be more negative than the one based on the output gap. It should be noted that the forecast for the current year based on the output gap will be revised as a result of the cyclical adjustment. The estimate based on the heatmap produced by the fiscal policy monitoring, in turn, will not be revised to any significant extent as a result of the cyclical adjustment. Revisions following real-time cyclical adjustments have been a problem with the output gap method. However, both estimates may be revised as the primary balance forecast is revised.

In Figure 10, the horizontal axis illustrates the estimates of the business cycle based on both the output gap and the composite indicator of the heatmap. According to both methods, the business cycle continued to be slightly positive in 2019 and turned clearly

negative in 2020. However, as regards 2021 and 2022, the estimates of the business cycle differ from each other. According to the composite indicator of the heatmap, the business cycle turned positive in 2021. The forecast of the composite indicator turns negative at the end of 2022, but at the full-year level of 2022, the business cycle will remain positive. In 2023, the business cycle will be negative according to the forecasts based on both the heatmap composite indicator and the output gap.

When the estimates of the structural primary balance shown in Figure 10 are examined in relation to the estimates of the business cycle illustrated on the horizontal axis, it can be seen whether the discretionary fiscal policy has been counter-cyclical or pro-cyclical relative to the business cycle. The estimates produced for 2019 and 2020 by both the output gap and the composite indicator are consistent: the fiscal stance was slightly pro-cyclically expansionary in 2019 but, in practice, very close to neutral. In 2020, in turn, the fiscal stance was counter-cyclically expansionary.

Here, too, the greatest differences between the estimates based on the output gap and the heatmap can be seen in 2021 and 2022. Based on the European Commission's output gap method, the Finnish economy would have remained in recession in 2021 and 2022, and the fiscal stance (based on the negative structural balance) would have been counter-cyclically expansionary. According to the composite indicator of the fiscal policy monitoring function's heatmap, which observes cyclical fluctuations directly, the business cycle in Finland was already positive in 2021 and 2022, and, based on the negative structural balance, the fiscal stance was pro-cyclically expansionary. For 2023, the assessments produced by both methods are again in line with each other: they assess the fiscal stance to be counter-cyclically expansionary.

Based on fiscal impulse, fiscal policy seems to become more contractionary in 2022 and 2023

Figure 11, in turn, illustrates the fiscal impulse by examining the change in structural primary balance in relation to the change in the business cycle indicator. The fiscal impulse estimate (Figure 11) based on the composite indicator of the heatmap produced by the fiscal policy monitoring function confirms the estimate based on the output gap for 2020: the fiscal impulse, too, was counter-cyclical.

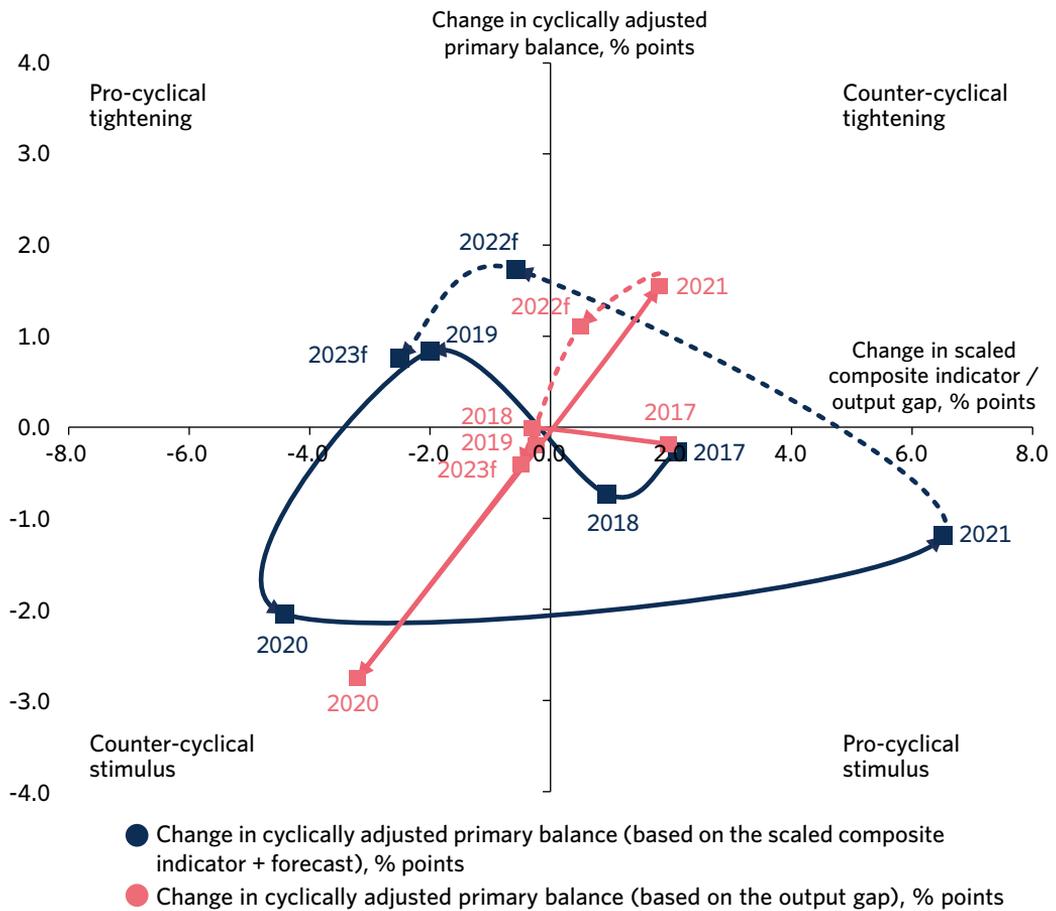


Figure 11: Fiscal impulse in relation to the change in business cycle: the change in structural primary balance (cyclical adjustment based on the output gap and the composite indicator) in relation to the change in both the output gap and the composite indicator produced by the fiscal policy monitoring function. The estimates for 2022 and 2023 are based on forecasts. Source: Ministry of Finance and the fiscal policy monitoring function.

However, for 2021, the conclusions differ from each other even in this respect. Based on the output gap, the fiscal impulse was counter-cyclically contractionary. The estimate of the 2021 fiscal impulse based on the composite indicator of the heatmap is pro-cyclically expansionary. The structural primary balance has deepened at the same time that the business cycle has improved. This reflects a situation where pro-cyclical fiscal impulse intensifies cyclical fluctuations. Such a situation highlights the risks of overheating of the economy, increasing inflation, and for example, labour shortage.

For 2022, the fiscal impulse estimates based on the output gap and the composite indicator forecast are closer to each other, and both estimates indicate that the change in fiscal policy is contractionary in a situation where there is no major change in the business cycle. In 2023, according to the composite indicator, fiscal policy will become contractionary in a clearly weakening business cycle (pro-cyclical contraction), whereas according to the estimate based on the output gap, the change in the business cycle will be minor and the fiscal impulse neutral.

The picture provided by the business cycle indicators affects the assessment of the fiscal stance

The nominal primary balance according to the national accounts statistics is used as a basis when the fiscal stance is examined in relation to the business cycle for the years 2019–2021. The Ministry of Finance's forecasts of the nominal primary balance, in turn, are used similarly in both approaches of this report for the years 2022 and 2023. The differences in the assessments of the fiscal stance in 2021 and 2022 and of the fiscal impulse in 2021 and 2023 are due to differences in the business cycle assessments. The business cycle assessment is used both in the cyclical adjustment of nominal primary balance to structural primary balance and on the horizontal axis of the analysis figures to illustrate the business cycle.

As described in section 2.1, the assessment of the business cycle based on the output gap differs from the one based on the composite indicator of the heatmap in 2021 and 2022. At the same time, the output gap estimate also differs from the business cycle assessment based on the Hodrick–Prescott filter: in Figure 8, the gap between GDP and the GDP trend is not negative in 2021 and in 2022, based on data on the first and second quarter. In addition, the output gap estimates produced by means of other methods using observations within the year confirm the cyclical development illustrated by the composite indicator of the heatmap. If these estimates were used in the assessment of fiscal stance, the results would be closer to the result based on the composite indicator than the one based on the output gap produced using the EU's common method. (See also the information box “The composite indicator of the heatmap is supported by other business cycle indicators“.)

The business cycle and fiscal stance should also be examined by means of indicators that monitor cyclical fluctuations directly and that are revised as little as possible. The heatmap of the fiscal policy monitoring function and its composite indicator seem to have worked quite well in this sense at the many rapid cyclical changes during the current parliamentary term.

2.3 The economic forecast on which the 2023 budget is based is realistic

In its autumn 2022 forecast, the Ministry of Finance projects Finland's GDP to grow by 1.7% in 2022. The Ministry expects the growth to be 0.5% in 2023 and 1.4% in 2024. The forecast does not differ significantly from other forecasts, and in the same way as the other forecasts, it projects Finland's GDP growth to slow down considerably in 2023.

Figure 12 shows the GDP forecasts for 2023 of the forecasters included in the examination. The forecasts have been prepared between 1 June 2022 and 11 October 2022. The figure also shows the consensus forecast generated by the forecasts and the upper and lower bounds of the 95% prediction interval. The forecasts of economic growth in Finland have weakened from last spring, particularly in the case of 2023. After August, the consensus forecast which takes into account the publication dates of the forecasts has approached zero. At the end of September, it projects growth of approximately 0.2% and 1.4% for 2023 and 2024, respectively. The consensus forecast is defined by means of the forecast time trend.

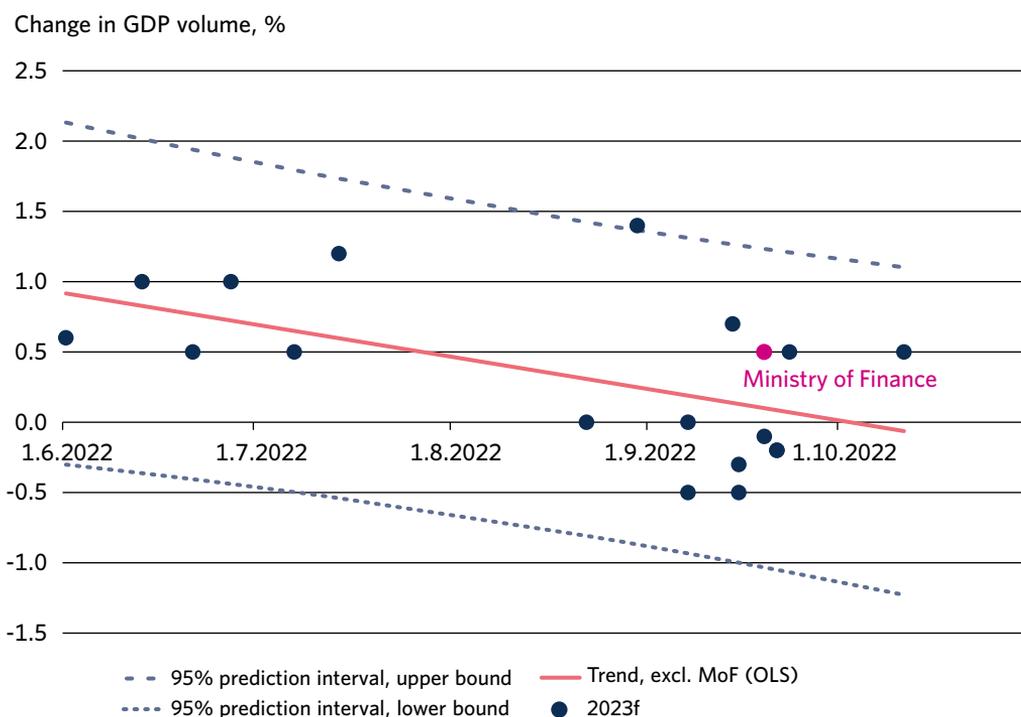


Figure 12: GDP forecasts for 2023, consensus forecast, and upper and lower bounds of the 95% prediction interval. Source: Forecasters, fiscal policy monitoring function.

Overall, the most recent forecasts are more pessimistic and distributed on both sides of zero. GDP growth is expected to slow down in 2022 and to remain slow or even fall to negative in 2023. The forecast of the Ministry of Finance is slightly more optimistic than the consensus forecast, which is based on other institutions' forecasts, but it falls within the prediction interval formed.

Table 5 compares the 2022–2024 economic forecasts of the Ministry of Finance with those of other forecasters in order to get an idea of whether the Ministry's forecasts are generally in line with those of the other forecasters. It is examined whether the forecasts of the Ministry of Finance fall within the prediction interval³⁹ calculated taking into account the publication dates of the other forecasts. Prediction intervals aim to describe the bounds within which 95 per cent of the forecasts are estimated to fall. Although deviations as such do not disclose the realism of the forecasts, they offer good starting points for examining whether the forecasters have similar understanding of the future economic development. Official forecasts must be realistic so that fiscal planning is based on a realistic picture of the economy.

The forecasts of the Ministry of Finance fall within the prediction bounds formed by means of a gathered sample of other institutions' forecasts and are in line with other forecasts, particularly in the case of 2023 and 2024. The economic forecast on which the state budget is based can be considered realistic within the meaning of the EU framework.

Table 5: Comparison between the forecasts of the Ministry of Finance and those of the other economic forecasters. The forecast of the Ministry of Finance is compared with the 95% prediction interval formed of other forecasts. The scale in the table: 1 = The MoF forecast falls within the 95% prediction interval that takes into account the publication dates of the forecasts. 0 = The MoF forecast falls outside the 95% prediction interval that takes into account the publication dates of the forecasts..

Forecast variable	2022f	2023f	2024f
GDP, change in volume, %	1	1	1
Imports, change in volume, %	1	1	1
Private consumption, change in volume, %	1	1	1
Public consumption, change in volume, %	0	1	1
Exports, change in volume, %	1	1	1
Investments, change in volume, %	1	1	1
Unemployment rate, % of labour force	1	1	1
Employment rate, % of population	1	1	1
Inflation, %	1	1	1
Current account, % of GDP	1	1	1
Government fiscal balance, % of GDP	1	1	1
Government gross debt, % of GDP	1	1	1

The Ministry of Finance's forecast of public consumption in 2022 is the only variable examined that falls outside the prediction intervals. It falls slightly below the 95% prediction interval that is formed of other forecasts and that takes into account the publication dates of the forecasts: the forecast value for public consumption is 1.8%, while the lower bound of the prediction interval is 1.9%. However, the forecast of the Ministry of Finance falls within the prediction interval based on the mean of the other forecasts. It should also be taken into account that the dispersion in the other institutions' forecasts of public consumption increases in later forecasts, which in turn reflects the uncertainty in the economy. When examining the prediction intervals of 95%, it should also be noted that individual forecasts may fall outside them. Inflation toteutunut kehitys, Inflaatio-ennustet vuosille 2022–2024 sekä 95 prosentin ennustevälien ala- ja ylärajat.

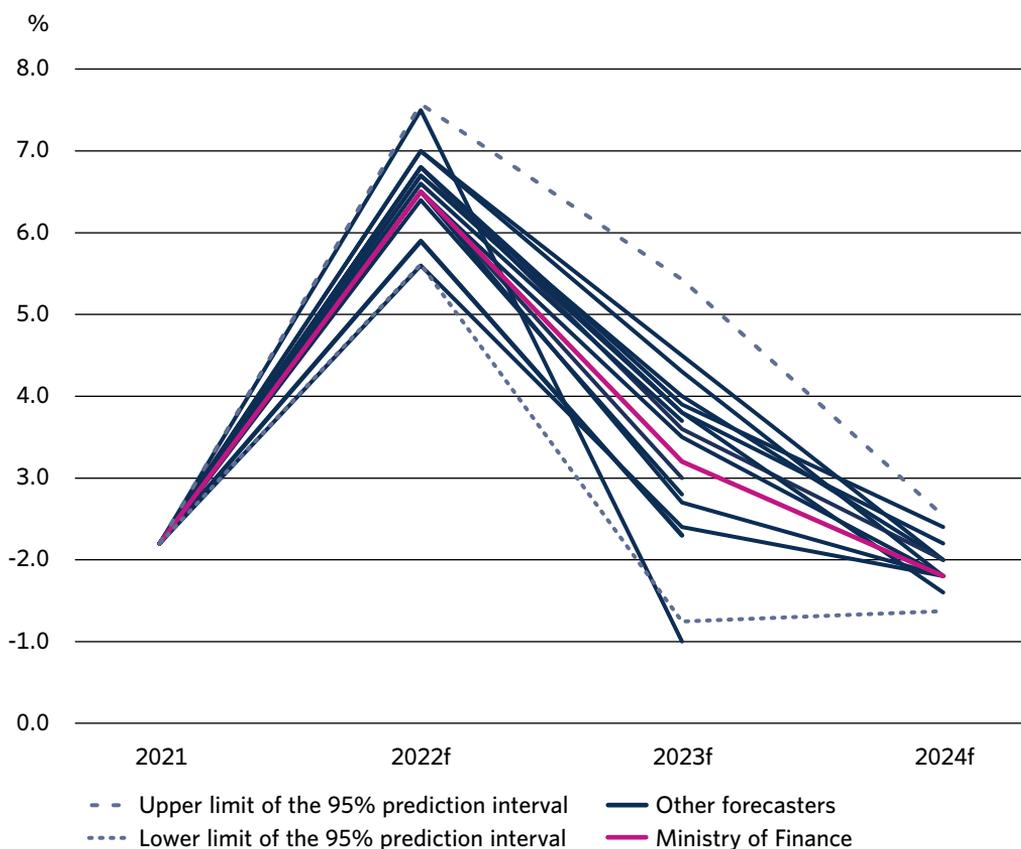


Figure 13: Actual development of inflation, inflation forecasts for 2022–2024, and the lower and upper bounds of the 95% prediction interval.

Figure 13 describes the forecast and actual inflation development of all forecasters. The figure also shows the 95% prediction interval, within which most of the forecasts fall. Inflation has continued to accelerate in Europe and is forecast to peak in 2022. Inflation has been exceptionally high and clearly higher than forecast in spring 2022. From the inflation forecasts, it can be seen that forecasters expect inflation to fall steadily towards 2024. The inflation forecast of the Ministry of Finance is very close to the mean of the other forecasts: the Ministry’s inflation forecasts are 6.5% for 2022 and 3.2% for 2023, while the mean is 6.6% and 3.3%, respectively.

The dispersion in the inflation forecasts for 2024 is considerably smaller, and the forecasts are very close to each other. While the standard deviation is 0.9 in the inflation forecasts for 2023, it is only 0.2 in the forecasts for 2024, which is a remarkably small deviation, considering the length of the forecast time period. The forecasts for 2024 are in line with each other, and the forecasters expect inflation to fall in the medium term towards the 2% target level of the European Central Bank. Due to the smaller standard deviation, the 2024 prediction interval is much narrower than in the case of the previous years. Moreover, some forecasters do not produce inflation forecasts for after 2023, and thus the set of forecasts for 2024 is more limited.

The crises have made forecasting the economy exceptionally difficult during the current parliamentary term

The fiscal policy monitoring function has assessed the realism of the Ministry of Finance's short-term economic forecasts in its fiscal policy monitoring reports published during the parliamentary term. The General Government Fiscal Plan is based on the Ministry of Finance's macroeconomic forecast and assessment of medium-term growth. Forecasting is challenging even in the case of normal cyclical fluctuations, and it has proved to be particularly difficult during the current parliamentary term, especially because of the Covid-19 pandemic and Russia's war of aggression. It is difficult to forecast the impacts of an individual crisis on the future economic development, and therefore the forecasts and the reviews of their realism have had to adapt to the changing world situation. Overall, the observations the fiscal policy monitoring function has made of the forecasts of the Ministry of Finance have been positive, and there have been no significant shortcomings in the realism of the forecasts.

The several crises that have taken place have made forecasting more difficult, which has also been reflected in the methods used to assess the realism of the forecasts. Assessment methods that differed from those used previously were used in connection with the pandemic. Furthermore, dummy variables were introduced in the assessment at the time of the Russian invasion of Ukraine in order to form a more realistic consensus forecast that takes into account the publication dates of the forecasts. During the parliamentary term, the fiscal policy monitoring function has also started to use assessment methods that take into account the publication dates of the forecasts.

In the spring 2020 economic survey, the forecast of the Ministry of Finance was more concise than in the surveys published during normal circumstances, and several forecasters published only a GDP forecast. However, the forecast of the Ministry of Finance contained the forecasts necessary for fiscal planning and an alternative scenario that took into account the assumed duration of the restrictions. Thus, the characteristics of both the recession of the 1990s and the financial crisis of 2009 were used exceptionally in the assessment of the realism of the forecasts. In the absence of a reference group, the most important real economy forecasts of the Ministry of Finance were examined separately, broken down by items in the national balance of supply and demand.

In spring 2020, the fiscal policy monitoring function considered that the forecast of the Ministry of Finance for the development of exports was optimistic when examined in relation to the historical development of world trade and Finnish exports during times of crisis. The Ministry of Finance also forecast economic growth in the post-pandemic year to remain more moderate than according to the other forecasters because of the longer-term decline in investment. In the June 2020 Economic Survey, the Ministry of Finance's forecast for exports became more pessimistic. In the autumn 2020 forecast, there was nothing to comment on in either respect.

The NAOF's fiscal policy audit and monitoring function⁴⁰ has paid attention to the fact that the assumptions the Ministry of Finance has made about the closing of the output gap, i.e. the stabilization of the economy at its potential in the medium term, have varied. The fiscal policy monitoring function has considered that the Ministry should more clearly justify its assumptions of the prevailing business cycle at the end of the forecasting

horizon. In addition, the fiscal policy monitoring function assessed in autumn 2021 that the Ministry of Finance's forecasts of public consumption and current account differed from those of other forecasters. However, it should be noted that both forecast variables were affected by the uncertainty of the pandemic-related expenditure and the latter was also affected by the uncertainties related to the restrictions to the distribution of dividend.

In spring 2022, following the Russian invasion of Ukraine, many forecasters published several alternative scenarios, as the impacts of the crisis weakened the prospects for economic growth. In the assessment of realism, the crisis was taken into account by comparing the Ministry's forecasts with the 95% prediction interval that takes into account both the publication dates of the forecasts and the Russian invasion. The number of forecasts for 2024 was modest, as several forecasters focused mainly on updating their GDP outlook. However, the forecasts of the Ministry of Finance fell within both prediction intervals in the case of all variables.

3 Sustainability of public finances and employment measures during the parliamentary term



The government debt-to-GDP ratio rose substantially in Finland as a result of the Covid-19 pandemic. However, when compared with the other EU countries, the increase was moderate. Assessments of the long-term sustainability of public finances did not change significantly during the parliamentary term, but the growth of the debt ratio and the rising interest payments mean that fiscal space has shrunk.

The employment measures taken during the parliamentary term fall clearly short of the impacts on public finances mentioned in the sustainability roadmap (EUR 1–2 billion) and the target the Government has set for the number of new employed people (80,000). However, the Government has decided on important employment measures, such as the removal of the right to additional days of earnings-related unemployment allowance. In relation to the sustainability gap baseline calculation, the impacts of the employment measures taken during the parliamentary term on public finances will be around EUR –130 to +380 million.

The Government introduced the sustainability roadmap to bend the growth curve of the debt-to-GDP ratio in 2020. However, the roadmap was not implemented in full. It would be useful to link the debt sustainability of public finances more closely to the statutory General Government Fiscal Plan.

In order to ensure debt sustainability, it would be important to take not only structural reforms affecting public service provision but also measures affecting revenue and expenditure directly. In strengthening public finances, it is important to choose such means that are the most favourable in view of economic growth and wellbeing. When the measures to be taken are selected, it is therefore necessary to have as comprehensive a knowledge base as possible on the structures and impacts of public expenditure and revenue.

When the outlook for general government finances is examined, it is necessary to take into account not only the well-established sustainability assessments but also the prerequisites of future economic growth. When assessing the outlook for human capital in Finland, a worrying trend emerges. The decline in human capital slows down economic growth and may increase the challenges faced by general government finances. This is why raising the educational level of the working-age population and increasing educated work-based immigration are important objectives.

3.1 The debt sustainability of public finances should be strengthened

When general government debt is examined, it is most important to monitor the government debt-to-GDP ratio. The ratio indicates better than an amount in euros how government debt develops in relation to the size of the economy, enabling thus international comparisons. The ratio also shows how the ability of the general government to manage and repay debt develops. For example, the possibilities of the state to generate income through taxation depend largely on the size of the economy. For these reasons, debt-related fiscal rules and targets are typically expressed in relation to GDP.

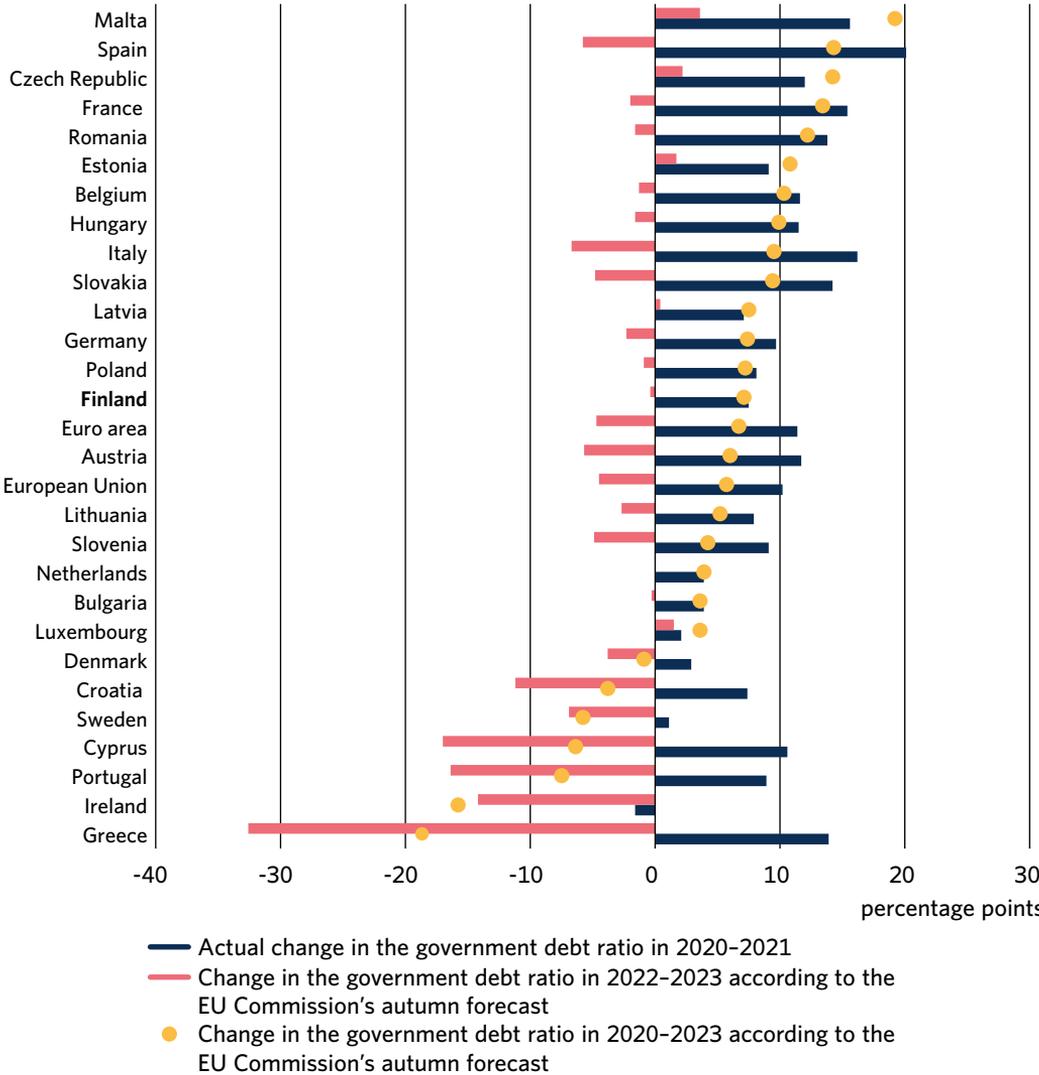


Figure 14: Actual change in the government debt-to-GDP ratio in 2020-2021 based on statistics, the EU Commission's forecast for the development of debt in 2022-2023, and the change in the government debt ratio in 2020-2023 based on them. Sources: EU Commission and Eurostat.

The Covid-19 pandemic had the greatest impact on the development of government debt during the parliamentary term. Finland's government debt-to-GDP ratio rose substantially in 2020–2021 but moderately compared with the other EU countries. The debt ratio rose by 7.5 percentage points in Finland, while it rose by 11.4 percentage points in the euro area and 10.2 percentage points in the entire EU area (Figure 14).

In 2022–2023, marked by Russia's war of aggression and the energy crisis, the development of debt ratios is influenced, *inter alia*, by the significant support measures taken by governments and by the higher inflation. As inflation increases nominal GDP, it, as a rule, reduces debt ratios. The more detailed impacts depend, among other things, on the effects of inflation on public expenditure and revenue. In 2022–2023, the development of Finland's general government debt ratio is forecast to be weaker than in the rest of the euro area and the EU. Forecasting the government debt-to-GDP ratio naturally involves a number of uncertainties. Therefore, the outcome of the examination for 2022–2023 should be considered indicative rather than an accurate estimate.

The 2019 Government Programme aimed at improving long-term sustainability of public finances by improving employment and increasing the productivity of the general government. No target was set for the development of the numerical long-term sustainability gap indicator (S2 indicator) during the parliamentary term, which is justified in view of the nature of the indicator. Sustainability analyses provide a good basis for the preparation of structural measures but are poorly suited as the foundation for fiscal policy. According to the NAOF's audit of sustainability assessments,⁴¹ it is not justified to use the sustainability gap indicator mechanically in the setting of fiscal policy objectives and the steering of general government finances, as many problems of economic indicators are highlighted in it. First, sustainability assessments are highly uncertain. For example, the assumptions underlying population projections have a significant effect on the assessments, and demographic factors (e.g. birth rate and immigration) can vary greatly. Second, changes in calculation methods and assumptions can result in a substantial fluctuation in the value of the long-term sustainability gap. All factors having a significant effect on sustainability cannot be impacted directly by political decision making. In sustainability calculations, it is also difficult to take into account the long-term impacts of fiscal measures, such as the positive impacts that reforms causing expenditure in the short term may have on growth. Despite the constraints of the sustainability gap indicator, improving the sustainability of public finances is a very important fiscal policy objective.

Based on sustainability indicators, the long-term sustainability of public finances has not substantially deteriorated or improved during the parliamentary term. The long-term estimates of the Ministry of Finance and the Commission's assessment have developed partly inconsistently (Figure 15). The Ministry of Finance estimates that the sustainability gap has decreased, while the Commission estimates that it has increased. However, the changes in the estimates are not significant considering the uncertainties associated with them. In addition to changes in the economic outlook, the results of the sustainability calculations are influenced by a number of computational factors and changes, for example, in the modelling of age-related expenditure in⁴² the long term. For this reason, the results are mainly indicative and provide mainly a general idea of the outlook for the sustainability of public finances.

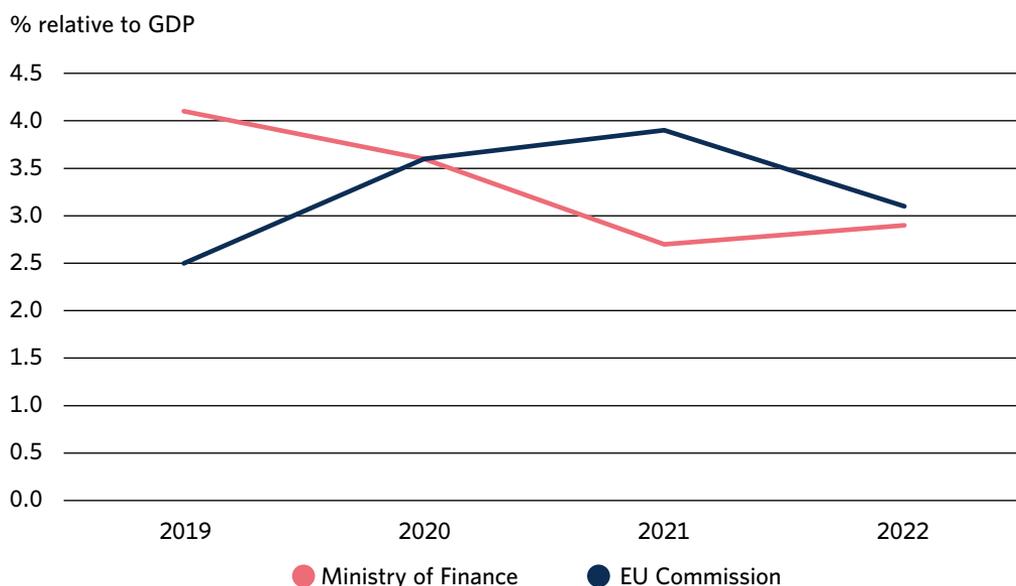


Figure 15: Development of the sustainability gap estimates of the Ministry of Finance and the EU Commission (long-term S2 indicator) in 2019–2022. Sources: Ministry of Finance's Economic Survey of spring 2019 and autumns 2020–2022. The EU Commission's assessment of Finland's Stability Programme of spring 2019, 2021 and 2022, and the EU Commission's Debt Sustainability Monitor of January 2020.

In addition to the long-term sustainability gap estimate, the EU Commission also estimates sustainability in other ways, e.g. by means of the medium-term S1 indicator. It describes the fiscal adjustment required to reach a 60% government debt-to-GDP ratio in the next 15 years. A key element in the Commission's assessment framework is the debt sustainability analysis, which examines several risk factors related to debt development over the next 15 years. On the basis of these results and the S2 long-term sustainability gap indicator, for example, the Commission assesses risks for different time perspectives.

Table 6: The EU Commission's assessment of the sustainability risk level of Finland's general government finances in 2019–2022. Sources: see Figure 15.

Sustainability risk level	2019	2020	2021	2022
Sustainability risk, short term	low	low	high	low
Sustainability risk, medium term	low	medium	low	medium
Sustainability risk, long term	medium	medium	medium	medium
Risk based on debt sustainability analysis (DSA)	low	medium	low	low

On the basis of the Commission's examination, the medium-term (15 years) sustainability risk of Finland's public finances has varied between low and medium (Table 6). The long-term sustainability risk has been medium. The results of the debt sustainability analysis, which affect both the long and medium-term risk assessment, have mainly indicated a low sustainability risk. The shortest-term sustainability risk assessment, in turn, indicated a high risk level in the Commission's 2021 assessment. This was due to the estimated high need for general government borrowing in the following year.

The overall picture that the indicators provide of the sustainability of public finances at the end of the parliamentary term is roughly the same as at the beginning of the parliamentary term. However, the debt level, which has become substantially higher during the parliamentary term, and the tightening monetary policy mean that the fiscal space has in any case diminished: interest payments are likely to burden public finances increasingly, and risk buffers have decreased.

Interest payments will increase after the exceptional period of zero interest rates

The market interest rates on government debt turned negative at the beginning of the parliamentary term (Figure 16). The outbreak of the Covid-19 pandemic increased interest rates, but the monetary policy decisions of the European Central Bank eased the pressure to raise them. The interest rate differential of Finland’s government bonds vis-à-vis Germany increased slightly at the beginning of the crisis but returned later to the pre-pandemic level. Interest rates on government bonds started to rise the beginning of 2022. The development of interest rates has been driven, for example, by the change in the inflation outlook and the decrease in central banks’ stimulus measures. The interest rate differential of Finland vis-à-vis Germany has again increased slightly since the start of Russia’s war of aggression and is now slightly more than 0.5%. Finland’s interest rate differential has risen vis-à-vis the Netherlands as well.

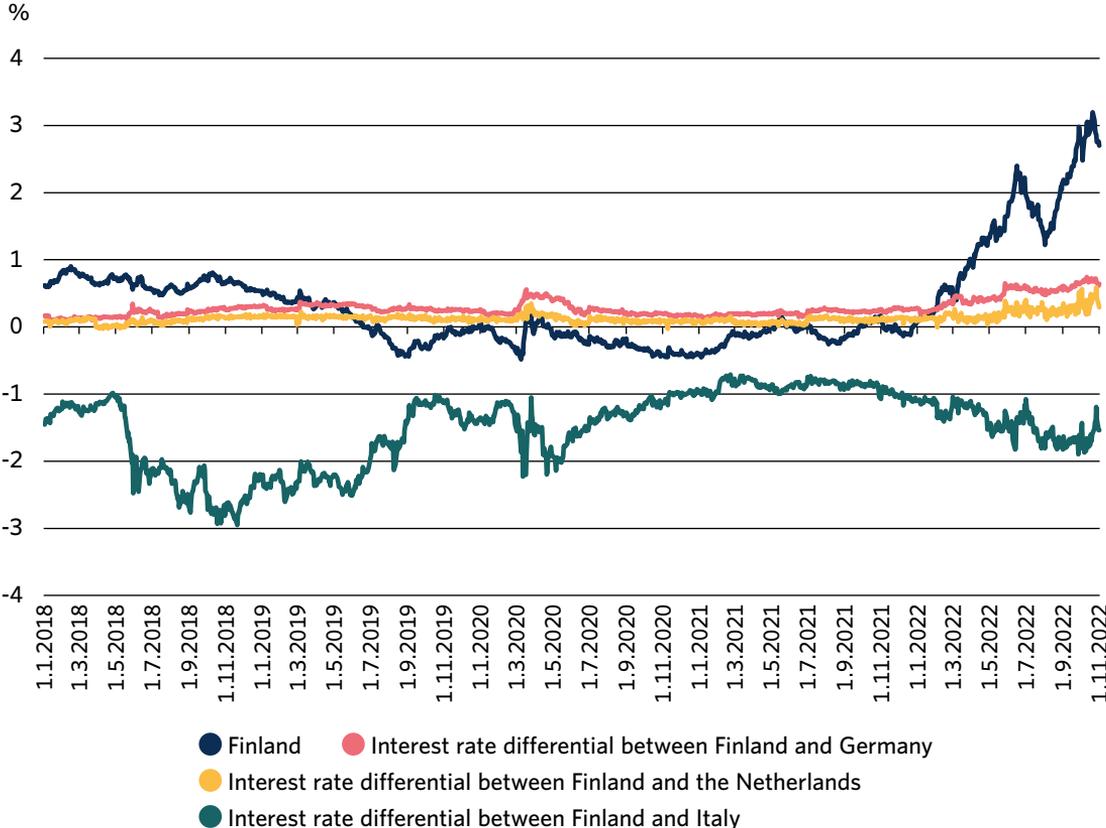


Figure 16: The interest rate of a 10-year government bond of Finland, Germany, and Italy, and the interest rate differential between Finland and Germany. Sources: Bank of Finland, Bundesbank, Banca d’Italia, Macrobond.

The fluctuations in market interest rates on central government bonds are not immediately reflected in full in the state’s actual interest payments. For example, old bonds of long maturity continue to have an impact on the debt stock for a long time. For this reason, the interest rates on the existing debt stock do not react to changes in market interest rates in real time. The speed at which interest payments respond to fluctuations in the market situation is also significantly affected by the interest rate swaps used in debt management. In spring 2022, the Ministry of Finance estimated⁴³ that a one percentage point increase in the general level of interest rates from the baseline forecast would increase the state’s interest payments by EUR 547 million in 2024 compared with the forecast. In its autumn 2022 forecast, the Ministry estimated central government interest expenditure for 2024 at EUR 2.0 billion.

The average interest rates on new central government debt fell for a long time during the parliamentary term, but at the beginning of 2022 the interest rates turned positive (Figure 17). In autumn 2022, the interest rates on both short-term and long-term borrowing were already positive. The amount of central government bonds issued in 2021, in turn, decreased from 2020, although the level continued to be higher than in the pre-pandemic years.

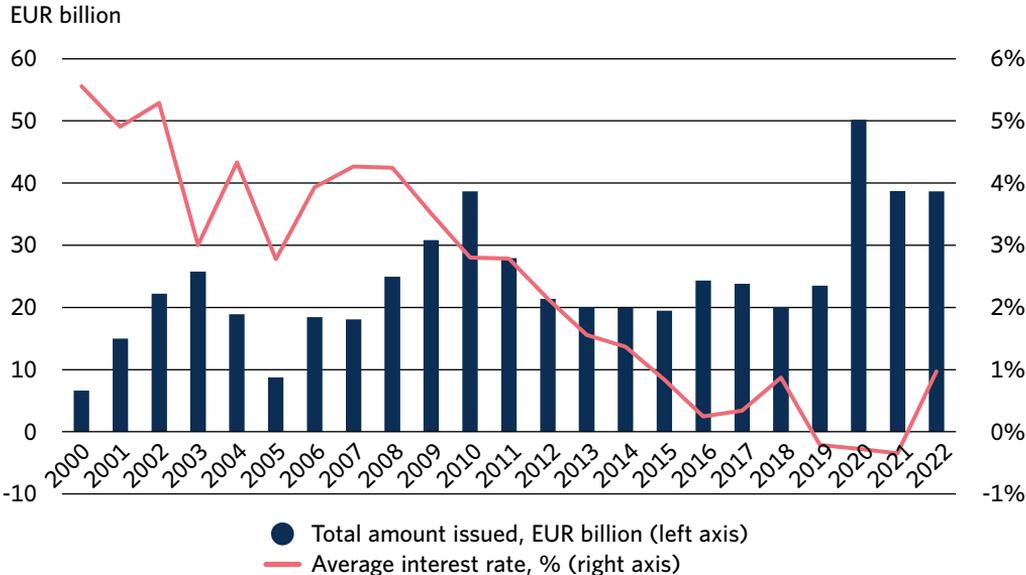


Figure 17: Central government bonds issued in 2000–2022 and actual average interest rates (yield) on the issues. The average interest rate has been calculated as a weighted average based on the issues whose interest rates have been published on the website of the State Treasury. The issuing methods and maturities of the bonds vary, and therefore the interest rates shown in the figure for different years do not reflect the interest rates on bonds of equal maturity. The impacts of interest rate swaps have not been taken into account in the data. As for 2022, the figure is based on information up until 25 October. Source: State Treasury, Bank of Finland, and fiscal policy monitoring function.

State guarantees have been growing for a long time (Figure 18)⁴⁴. Export credit guarantees, in particular, have been on the increase since 2005, although their growth has recently slowed down. There are no fiscal policy restrictions for the volume of guarantees or the total risk they involve, although an increase in guarantee authorizations requires a government proposal and a decision by Parliament.

During the parliamentary term, the volume of state guarantees has increased by around EUR 10 billion. The increase is attributable to, for example, the increase in guarantees granted by the National Housing Fund and student loan guarantees, as well as the guarantee arrangements implemented due to the Covid-19 pandemic (e.g. Finnair and shipping companies). The Covid-19 pandemic also increased the risks associated with guarantees. Due to the book losses and partly realized losses incurred during the Covid-19 crisis, the Finnvera Group’s reserves to cover credit losses fell sharply, and funds were directed from the state budget to strengthen them.

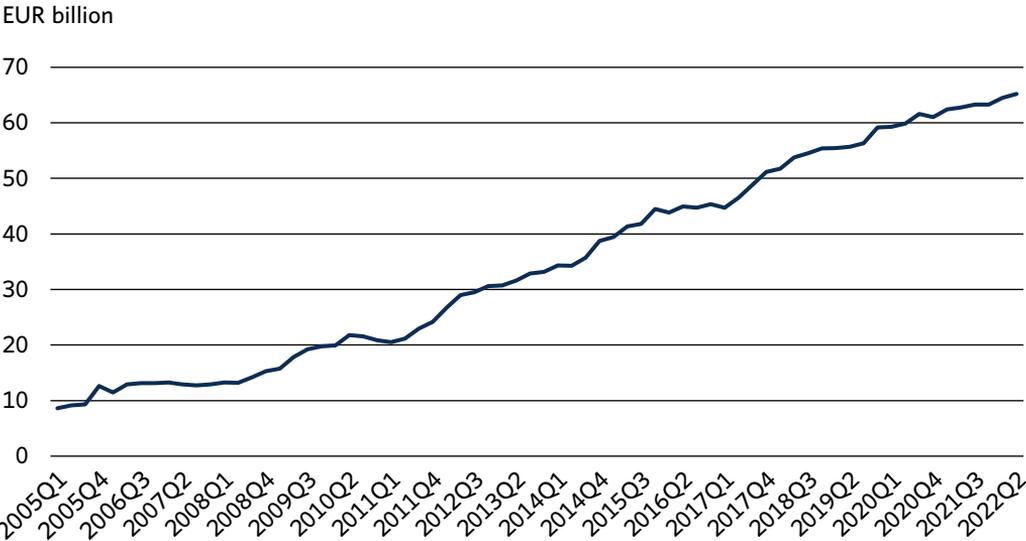


Figure 18: Development of state guarantees by quarter in 2010-2022. Source: Statistics Finland.

The National Audit Office has stressed⁴⁵ the importance of comprehensive management of contingent liabilities: the state’s overall risk should be limited, and risk reporting should be comprehensive. Reporting on the development of the overall risk position should be improved, and the presentation of the impacts of even unlikely “rainy day” scenarios on public finances should be expanded. The National Audit Office has also recommended strengthening Finnvera’s financial supervision. A Government proposal that aims to transfer Finnvera’s financial supervision from the Ministry of Economic Affairs and Employment to the Financial Supervisory Authority was submitted to Parliament in November 2022.

During the parliamentary term, the State of Finland’s liabilities were further increased by the EU Member States’ increased joint liabilities. The most important element causing new liabilities is the EU-level Recovery and Resilience Facility (RRF). The RRF makes

support available to Member States in both loans and grants. The support available in grants amounts to EUR 390 billion, which can be considered a liability that is certain to be realized in Member States. This is a kind of accrued debt: the final expenditure is incurred – or the Member State projects for which the funding is used are implemented – before the payment is made. Finland’s contribution to the financing of the RRF support in the form of grants will fall due for payment between 2028 and 2058. It is estimated to amount to EUR 6.6 billion at 2018 prices, and the final amount will depend on Finland’s future contributions to the EU budget. The part of the RRF intended for support in the form of loans can be considered a guarantee-like contingent liability, which will only be realized if the lenders do not repay their loans.

In addition to explicit state guarantees, the general government also has other contingent liabilities. They are related, for example, to the operations of companies that are critical to society. Financial needs that fall under the general government’s liability may arise in crisis situations, as in connection with the energy crisis of 2022. Funding may be needed by both publicly and privately owned companies, as in the banking crisis of the 1990s. Due to such implicit liabilities, the amount of potential liabilities to be borne by the general government cannot be calculated mechanically, and a level of government debt ratio or net debt ratio that would provide sufficient buffers cannot be determined unambiguously. However, it is also important to take into account the possibility of unexpected large expenditure needs when determining the fiscal stance and assessing the sustainability of public finances.

The size of pension funds has increased, but the net financial assets of the central government have decreased

Some of the general government corporate holdings and other financial assets act as a buffer against risks. Assets that are easy to liquidate and retain their value should be taken into consideration, in particular, as a factor that improves the sustainability of general government finances. The current fiscal governance framework deals with liabilities only as a gross concept and does not take into account general government receivables. When the concepts of net liabilities or net assets are defined, it is possible to take into account, in addition to the liabilities, all or only liquid financial assets, as well as fixed assets such as buildings, structures and land. Net assets are calculated by deducting liabilities from assets, and net liabilities are calculated by deducting assets from liabilities. In this assessment, net assets refer to total financial assets net of total liabilities. Fixed assets have not been taken into account.

The general government net financial assets have increased since the financial crisis that ended in 2009 as the value of the investment assets of employment pension institutions has increased (Figure 19). The liabilities and financial assets of the local government and other social security funds have been roughly in balance throughout the review period. The growing amount of debt has steadily decreased the net assets of the central government, although the growth of central government financial assets has partly offset this negative development.

During the 2019–2022 parliamentary term, the development of net assets has been impacted not only by the state’s growing indebtedness but also by rather intense fluctuations in the equity assets of employment pension institutions and the state. The valuation levels were lowered temporarily by the Covid-19 pandemic but began to rise sharply after that. The growth turned to a decline as a result of Russia’s war of aggression and the energy

crisis. However, the assets of employment pension institutions do not function as a fiscal buffer in the same way as the state assets, as the counterpart of pension funds is the significant pension liabilities to be paid in the future. Nevertheless, pension funds and the development of their size play a key role in the pension system and also for the sustainability of public finances.

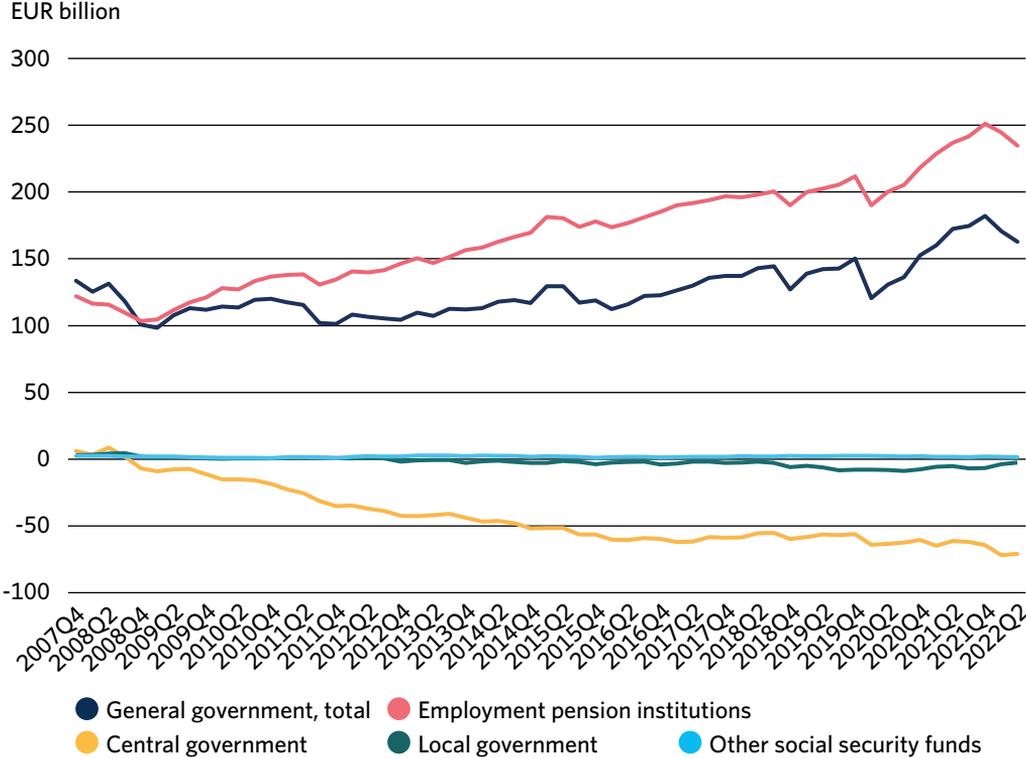


Figure 19: Development of general government net assets in 2007-2022. The data have been calculated by deducting total liabilities from total financial assets. Source: Statistics Finland.

In practice, the concepts of net liabilities and net assets differ from the gross concepts for instance in that the sale of financial assets (such as dividend-yielding shares) in order to finance current expenditure does not affect gross debt but weakens general government net liabilities. Correspondingly, assets acquired with debt are reflected in the increase in gross debt although they do not impair the financial wealth position of the general government.

In addition, certain changes in the way statistics are compiled do not affect net indicators. For example, in summer 2022, Statistics Finland made a methodological change related to statistics on subsidized loans for rental dwellings and right-of-occupancy dwellings. After the change, the loans have been recorded in statistics as loans granted by the general government and corresponding general government debt. The change increased the level of general government liabilities significantly, e.g. by nearly six percentage points for 2021. Based on the level of gross debt, the state of general government finances would now be

worse than before the statistical change. However, the change does not affect the net debt indicator, as a corresponding amount of assets was transferred to the general government in exchange for the loans. On the other hand, the significant decrease in the value of the state's holding in Fortum in 2022, for example, weakened the net debt indicator, whereas the decrease in the value of equity assets was not directly reflected in gross debt.

Statistical practices and the quality of statistics have a major impact on the knowledge base of economic analysis, fiscal policy, and economic forecasts. Therefore, the National Audit Office audited the statistics on general government finances in 2022 (see the information box: The picture of public finances as well as fiscal forecasts are built on reliable statistical data). The audit found fiscal statistics reliable.

The picture of public finances as well as fiscal forecasts are built on reliable statistical data

In the EU countries, data on public finances, such as government debt, government deficit, tax rate and public expenditure, are compiled in compliance with statistical legislation and uniform definitions and methods. In 2022, the National Audit Office conducted a fiscal policy audit that aimed to ensure that the statistical data on which fiscal policy and other economic decision-making is based provide a good and reliable foundation for the decision-making. On the basis of the audit, the fiscal statistics compiled by Statistics Finland provide a good basis for this. Users were found to have good experience of statistical data.

Fiscal statistics are subject to extensive and systematic quality assurance. Eurostat and its quality assurance work have a key role in this. One of the reasons why Eurostat systematically assures the quality of Member States' fiscal statistics, focusing on methodological and classification issues, is that it allows Member States to rely on the comparability of each other's statistical data.

Due to Eurostat's prominent role, the role of the quality assurance conducted by Statistics Finland itself has remained smaller. This applies particularly to quality assurance at the Statistics Finland level. In the fiscal statistics production processes, quality assurance is more systematic than in other statistical areas. However, based on the audit, the guidelines related to the statistics production processes are inconsistent and partly outdated.

Quality assurance should not be left excessively to Eurostat, and Statistics Finland should assume a more active role in this. The National Audit Office also recommends that the description of the quality assurance process aimed at users should be developed.

Structural reforms progressed during the parliamentary term despite the crises

Despite the crisis conditions, the Government has succeeded in carrying out significant structural reforms. The removal of the right to additional days of earnings-related unemployment allowance will improve the sustainability of public finances. The extension of compulsory education, on the other hand, causes costs in the short term, but in the long term, may improve sustainability if the potential benefits of the reform are realized. The impact assessments of these reforms are discussed in section 3.3.

Of the reforms carried out during the parliamentary term, the healthcare and social welfare services reform (health and social services reform) is, due to the size of health and social expenditure, the most critical one in view of the impacts on public finances. One of the reasons that contributed to the implementation of the reform during this parliamentary term was that the scale of the reform was smaller than that of the reform prepared in the previous parliamentary term, which included, for example, a broad freedom-of-choice model. The progress of the reform was also facilitated by the fact that the budgetary constraint contained in it is not as strict as it was in the previous parliamentary term. This proved to be problematic in view of the Constitution⁴⁶.

On the other hand, the looseness of the budget constraint in the ongoing reform increases uncertainty about the impacts of the reform. It is currently uncertain whether the reform will improve the sustainability of public finances. The high transition costs in the initial stage will not be a major problem if it can be ensured during the implementation of the reform that they remain temporary. In the long term, it is essential whether the reform will be able to realize the saving potential through, for example, economies of scale, efficient management practices, faster adoption, and digitalization of services. It is of paramount importance that the central government steering of the activities and finances of the wellbeing services counties also curbs costs.

The way in which the steering of the finances of wellbeing services counties was integrated into the overall fiscal steering in the General Government Fiscal Plan does not fully support curbing the growth of expenditure. The rationale of the Government proposal included the objective that the determination of the wellbeing services counties' borrowing authorisation and, at the same time, the level of investment should be based on the General Government Fiscal Plan and the counties' debt management capacity. However, the provisions of the Act on Wellbeing Services Counties (611/2021) do not suggest that the counties' borrowing authorisation would be strongly steered by the General Government Fiscal Plan. In normal circumstances, the borrowing authorisation is granted independently of the General Government Fiscal Plan. The borrowing authorisation can be lower only in exceptional circumstances if the fiscal position of the general government, central government or wellbeing services counties deteriorates to a significant and exceptional degree. Even in this case, this would be a discretionary decision. Thus, the Act does not clearly reflect the government proposal in that the level of indebtedness of the wellbeing services counties would be determined by the requirements set by the General Government Fiscal Plan. However, the regulation related to borrowing authorisation limits the investment opportunities of the wellbeing services counties even when the borrowing authorisation is based on imputed debt service coverage instead of the conditions set by the General Government Fiscal Plan.

In its opinions on the health and social services reform, the National Audit Office emphasized⁴⁷ that retrospective adjustment of the funding of the wellbeing services counties to correspond to the actual costs entails the risk that the costs will increase more rapidly than could be expected on the basis of the funding model. On the other hand, if the streamlining potential of the service provision is realized successfully, the funding can also be reduced in the funding model. From the perspective of the sustainability of public finances, it would therefore be important, once the transition costs of the initial stage of the reform have decreased, to pursue a more favourable expenditure development than the expenditure path that is mechanically produced by the current funding model.

The expenditure path generated by the wellbeing services counties' funding model based on the current assumptions should therefore not be considered a sufficient objective if greater streamlining impacts prove possible during the implementation of the reform. It would therefore be important to assess the saving potential of the health and social service provision on a regular basis, regardless of the steepness of the development path of health and social services expenditure according to the sustainability gap estimates. This development path will also be revised due to, for example, computational factors and methodological changes.

The sustainability roadmap was not utilized in full - sustainability should be strengthened in the next parliamentary term

At the outbreak of the Covid-19 pandemic in 2020, the Government drew up a sustainability roadmap to serve as a key tool for improving the sustainability of general government finances. In the first phase of the sustainability roadmap in June 2020, the Government decided that its objective was to stabilize the government debt-to-GDP ratio by the end of the decade. The fiscal policy monitoring function found the objective important and considered that the sustainability roadmap would provide a foundation for achieving the objective, even though it regarded the roadmap as too general in nature. The Government specified the roadmap in autumn 2020. The fiscal policy monitoring paid attention to the fact that the roadmap was not fully consistent with the employment measures on which the Government decided at the same time.

According to the spring 2021 General Government Fiscal Plan, the Government's objective is to bend the growth curve of the debt ratio by the middle of the decade. The measures to be taken in order to achieve the objective were still not described in sufficiently concrete terms. The sustainability roadmap included then – in line with the opinions expressed by the fiscal policy monitoring function – sensitivity analyses of the development of the debt ratio. The introduction of sensitivity analyses was useful, as they reflect, on the one hand, the inherent uncertainty of debt scenarios and, on the other hand, the dependence of the debt ratio on the underlying factors, many of which can be influenced by fiscal policy. In addition, the sustainability roadmap of spring 2021 presented different alternatives for the combined effects of different measures on the development of the debt ratio (e.g. increased R&D investments combined with a stronger improvement than in the basic option). The different estimates of the development path reflect well the fact that there are alternatives in fiscal policy even if the basic premise is to stabilize the debt ratio or to turn it to a downward path.

According to the sustainability roadmap of spring 2021, the Government was to assess the sustainability roadmaps as a whole extensively in the Government discussion on spending limits in spring 2022. Another aim was to use the sustainability roadmap updated annually as a document that steers the Government's policies. However, the Government did not publish an updated roadmap in spring 2022. Instead, the sustainability roadmap was only mentioned briefly in the General Government Fiscal Plan. The fact that the roadmap was not discussed in connection with the General Government Fiscal Plan was due to the sudden change in the operating environment caused by the Russian invasion of Ukraine. In its June 2022 report, the fiscal policy monitoring considered it important to update the sustainability roadmap as soon as possible.

The Government did not update it in connection with the preparation of the 2023 budget, either. This is problematic because, in order for the objectives set for the sustainability of public finances to be achieved, it is essential at least once a year to monitor the status of the objectives, the progress of concrete measures, and the scale of any new measures required. Crises emphasize the importance of solving long-term challenges. It should also be noted that, despite their negative effects, the Russian war of aggression and the energy crisis in 2022 did not undermine the basis of the sustainability roadmap: the objectives of stabilizing or reducing the debt ratio have not become unrealistic even in the changed circumstances. This is partly due to the high inflation, which has contributed to the temporary stabilization of the government debt-to-GDP ratio.

In October 2022, the Government published a new version of the sustainability roadmap, but the new version did not propose any new concrete measures with regard to fiscal sustainability. Nor was the roadmap linked to the preparation of the Government's future decisions. In addition, the picture of public finances presented in the roadmap was based on outdated 2021 estimates of their development: the section dealing with the current situation corresponds exactly to the data in the sustainability roadmap of spring 2021. Therefore, the fiscal consolidation needs presented in the roadmap of October 2022 were smaller than they would have been on the basis of up-to-date data. With regard to fiscal sustainability, the new version was therefore no actual update of the sustainability roadmap.

The estimates of how much public finances should be strengthened in order to at least stabilize the debt ratio change radically as the budgetary forecasts change. In any case, the achievement of this objective can only be ensured by improving the structural general government fiscal position. It should be noted that the current legislation already contains provisions on a relatively tight target-setting: in normal times, the Government should in practice strive for balanced public finances⁴⁸. However, this statutory obligation will not be binding before 2024 due to the exceptional circumstances defined at the EU level. This balance objective, on the other hand, is consistent with the typical debt ratio stabilization or reduction targets: fiscal balance (and even a small deficit) usually leads to a decreasing debt ratio when nominal GDP grows.

When fiscal policy objectives are set, the role of the statutory objective of balanced general government finances should therefore be emphasized – while ensuring that the objective is set at an adequate level in view of the government debt ratio. As proposed in November 2022 by the working group of the Ministry of Finance set up to develop the steering of general government finances⁴⁹, the debt ratio is better suited in its nature to serve as a long-term goal or a reference point than as an operational objective. There are many uncertainties in the development of the debt ratio: the level of the debt ratio and its annual changes can be affected as described above by, for example, technical statistical changes or an unexpected increase in inflation. It is important that the debt ratio target should not lead to inappropriate fiscal policy choices related to statistical methods⁵⁰.

Furthermore, as there have been rapid fluctuations during the current parliamentary term in the outlook for the development of the debt ratio, the measures to achieve the debt ratio target should be set in fixed euro amounts so that the scale of the measures is not changed constantly when the outlook for the debt ratio changes. This applies both to direct revenue and expenditure consolidation and to structural measures with slower impacts. However, if the outlook changes for a longer period of time and the measures do not appear to be sufficient in relation to the objectives, it should be possible to take decisions on any necessary additional measures.

In the sustainability roadmap of spring 2021, the set of measures to strengthen public finances was built in such a manner that if structural measures failed to strengthen public finances sufficiently, the remaining portion would be covered by measures affecting expenditure and revenue directly. It is indeed probably impossible to ensure that the debt-to-GDP ratio is stabilized or brought permanently to a downward path by merely structural measures that are slow to impact.

Due to the need to strengthen public finances, expenditure and taxation should be examined comprehensively in the coming years, and discretionary measures to strengthen the central government's fiscal position should be taken on the basis of this examination. The need for diverse measures is fuelled by the ageing of the population and new expenditure needs, such as defence expenditure and investments in the green transition. In strengthening public finances, it is important to choose means that are the most favourable in view of economic growth and wellbeing. When the measures to be taken are selected, it is therefore necessary to have as comprehensive a knowledge base as possible. In its decision-making, the Government should therefore utilize the most comprehensive surveys of the structures and impacts of public expenditure and revenue.

Experience of the sustainability roadmap during this parliamentary term shows that it is possible to draw up and develop a systematic plan for achieving debt ratio targets, but the roadmap remained too general for that purpose. On the other hand, experience suggests that the sustainability roadmap is easily overshadowed by burning issues if the Government has not been committed to it as an integral part of regular fiscal planning. The sustainability perspective should therefore be integrated more closely into the statutory planning of public finances.

In its audit of sustainability assessments in 2019, the National Audit Office proposed that in the annual General Government Fiscal Plan, the Government should be obliged to present sustainability assessments of general government finances for several time frames according to alternative scenarios. The experience gained in the parliamentary term supports this idea: irrespective of the debt ratio target set by each government, linking longer-term debt sustainability assessments to the General Government Fiscal Plan on a regulatory basis would ensure that long-term debt development would be systematically included in the Government's decision-making process and in the information provided to Parliament.

3.2 The poor outlook for the development of human capital undermines Finland's long-term growth prospects

Established assessments of the sustainability of public finances assess sustainability in a rather general manner, which may lead to ignoring phenomena or risks that have an essential impact on sustainability. For example, educational outlays are typically taken into account in calculations only as an item affecting public expenditure directly, while the impacts of competence level on economic growth are ignored. In this section, we will assess the development of human capital and its impact on economic growth.

Due to its demographic structure and the stagnation of the growth in the education level of young people, Finland is facing significant challenges as regards its long-term economic growth prospects. The unfavourable demographic trend will result in rapid ageing

of the population in the coming decades. The number of working-age people between 15 and 74 years, used in international reviews, began to fall in the early 2020s. The fall in the working-age population of 15–64-year-olds, which is typically monitored in Finland, began already in the early 2010s with the retirement of the post-war baby boomers.

According to population forecasts, the ageing of the population and the decrease in the number of working-age people will continue, as the new young generations entering the working-age population continue to be smaller than the retiring age groups. This has been the case already in the past, but so far the age groups of young people reaching working age have been better educated than those who retire. This is of great importance for long-term economic growth, as the educated labour input available to the national economy consists of the number of working-age people and their level of education. However, the situation is deteriorating rapidly.

Kokkinen (2012)⁵¹ has examined the link between educated working-age population – i.e. the human capital available in the national economy – and long-term economic growth in Finland. Kokkinen, Obstbaum and Mäki-Fränki (2021)⁵², in turn, have forecast the development of the working-age population by type of education in 2000–2070 and used this forecast for human capital in forecasting long-term economic growth. According to a pressure projection based on unchanged policy, human capital will continue to grow in the 2030s but will begin to decrease in the mid-2040s. According to a calculation updated for this report, human capital will decrease annually on average by around –0.1% in the late 2040s, around –0.3% in the 2050s, and around –0.4% in the 2060s.

In the above-mentioned studies and in these updated calculations, the growth in human capital is measured in the framework of the national accounts based on the degrees completed by the working-age population by level of education. Degrees completed at different times are weighted by the volume of final consumption expenditure on the education services used for the specific degree. In this case, the total human input to output in the economy is equal to the hours worked by educated labour force.

Figure 20 presents a projection of human capital based on unchanged policy and two scenarios. Scenario 1 presents a projection of human capital development in 2000–2070 if the objective set out in the Ministry of Education and Culture's vision for the Finnish higher education and research in 2030 were realized and 50% of 25–34-year-olds were tertiary graduates from 2030 onwards.⁵³ Such an increase in the education level of young people would clearly improve the growth of human capital in the 2030s. However, because age groups continue to become smaller, human capital would eventually start to fall in the late 2040s, and the decline would continue in the 2050s and 2060s. In 2070, the level of human capital would be around 5% higher than in the case of unchanged policy.

Volume, EUR billion, reference year 2010

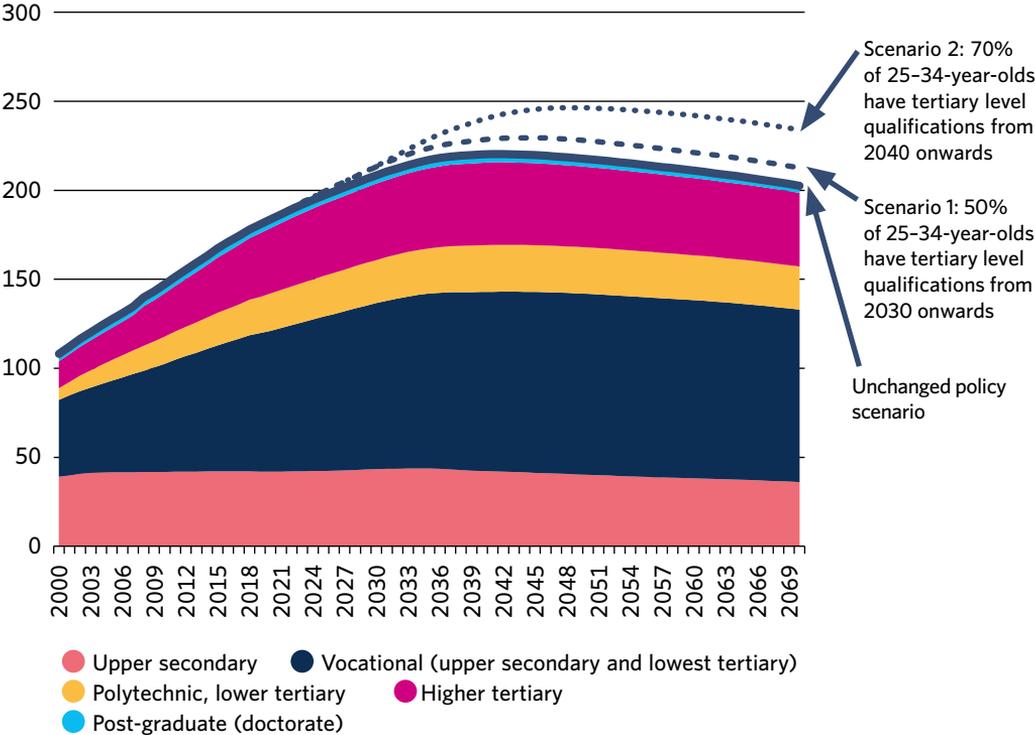


Figure 20: The human capital available to the national economy will start to decrease in the mid-2040s (unchanged policy scenario). However, the development can be influenced, for example by scenarios 1 and 2 illustrated in the figure. The extension of compulsory education to 18 years of age and its estimated costs have been taken into account in all the scenarios. Sources: Calculations by the fiscal policy monitoring function; Kokkinen, A., Obstbaum, M., and Mäki-Fränti P. (2021); Kokkinen, A. (2012); Statistics Finland.⁵⁴

In its report on the Government’s Education Policy Report, the Parliamentary Education and Culture Committee stated that “on the basis of current foresight data, the objective should be that by 2040 up to 70% of young adults have completed a tertiary degree”.⁵⁵ Scenario 2 in Figure 20 presents a projection of human capital development in 2000–2070 in line with the objective of the Education and Culture Committee in the case that 70% of 25–34-year-olds were tertiary graduates from 2040 onwards. Under this assumption, the outlook for human capital development will already improve considerably, especially in the 2030s and 2040s, and the decrease in human capital will be slower and take place later. In this scenario, the level of human capital in 2070 will be around 10% higher than in the unchanged policy scenario.

The unchanged policy projection of educated working-age population is based on the population projection and the assumptions that the student participation rate and degree completion rate remain unchanged

The unchanged policy projection (see Figure 20) is a kind of pressure projection that is based on the population projection which was published by Statistics Finland in 2021 and in which each age group was one year wide. As is typical of pressure projections, this projection assumes that there will be no changes in the participation in education of each age group among 16–74-year-olds but that the situation will remain unchanged from the past 3–5 years. It was possible to forecast the number of completed degrees on the basis of the projections of the number of students, when it was assumed that the percentages of graduates remain unchanged from the last few years. Finally, the degrees were valued by multiplying the number of degrees by the average amount of education expenditure per student used in the years of studying for each degree in each level of education. .

There is room for improving the education level and the share of young people with tertiary qualifications in Finland. According to Statistics Finland's statistics on the educational structure of population, 36.6% of 25–34-year-olds were tertiary graduates in 2020. Finland has fallen below the OECD average in the share of tertiary graduates in the age group of 25–34-year-olds. In the leading countries, the share of tertiary graduates is reported to be 65%–69%.⁵⁶

Time should not be wasted in increasing the education level of young people, as many 24-year-olds who have already completed their education in 2020, for example, will be 34 years in 2030. In recent years, the number of young people who start higher education has increased and studies have been started earlier. However, this trend is not enough to increase the share of tertiary-level graduates to the targeted 50% of 25–34-year-olds in 2030.⁵⁷ It is still theoretically possible to reach the 70% target set for 2040 from the baseline of approximately 37%. However, this would require considerable measures.

In any case, the development of human capital can still be influenced for instance by investing in the education level of young people. It would also be important to pay attention to the attractiveness of education and training, labour force participation, finding and offering employment, and increasing the birth rate. An increase in educated work-based immigration would also increase human capital. Educated work-based immigration would have an even greater impact if immigrants had children who were willing to educate themselves. This would alleviate the problem resulting from the fact that the predicted young age groups to be educated are so small.

The aforementioned ways of influencing the numbers of educated working-age population in the future naturally also involve challenges. For example, it is difficult to increase the birth rate through discretionary measures. Correspondingly, attracting educated work-based immigrants to Finland is not straightforward, as evidenced by the number of educated immigrants so far.

The analysis in this section is based on human capital by education assessed in the national accounts framework

In traditional economic growth theory, the growth of GDP is explained by fixed capital and labour input.⁵⁸ However, in empirical examination, these internal variables in the model leave a significant portion of GDP growth unexplained. The unexplained portion is called Solow's residual or total factor productivity. Many modern economic growth theories have emphasized the importance of human capital as one of the most significant elements of economic growth since the 1980s.⁵⁹ Taking human capital into account is thought to improve the ability of the model to explain economic growth. In different models, human capital has been proposed to act directly as a factor in production or a factor enhancing labour input or enabling technological progress and its adoption in the domestic production.

However, it has proved highly difficult to verify the link between human capital and economic growth by real-world data in the macro economy level. Studies have typically used the years of education of the working-age population or the participation rates of young people in education as an indicator of human capital. Some of the studies that have examined the empirical relationship have reported that education has had a statistically significant positive impact on economic growth⁶⁰, while some have not found any statistical significance or have reported that the impact has been negative⁶¹.

It should be noted that the empirical equivalents of other key macroeconomic variables – GDP, fixed capital, labour input – have been formed in the system of national accounts (SNA 2008). In fact, examining human capital in the same systematic framework as other variables may explain the above-mentioned contradiction between theory and empirical research. Kokkinen (2012) has described how human capital obtained through education can be measured within the core of the national accounts in a manner comparable to measuring fixed capital. In this case, the outputs used in the system as investments include both human and fixed capital. This empirical measurement showed a strong, statistically significant link between human capital and economic growth, i.e. a long-term cointegration relationship. Correspondingly, labour productivity (GDP/L) can be explained by internal variables of the model, i.e. fixed capital and human capital relative to labour input (K/L and H/L, respectively). In long-term projections and economic examinations, it is prudent to use only such an empirical human capital variable that can explain economic growth. In forecasts of economic growth, it is good to use a model that explains previously observed economic growth with internal variables of the model.

Assessing human capital by education within the national accounts follows the valuation principles and other internal rules of the international standard for the System of National Accounts (SNA 2008).⁶² The outputs sold on the market are valued at market prices, whereas non-market products customized for companies' own end use and non-market outputs of the general government are valued by production costs. Public education services are thus valued by production costs (compensations of employees, consumption of capital, and intermediate consumption), because this is the amount of money paid for them in the national economy. It is important to note that the fixed-capital products produced by the general government (e.g. roads, railways, waterways) and the non-market investment products customized for companies' own end use (e.g. information systems produced for their own use, computers, and research and development) are valued in the same way. The system of national accounts is developed by the UN, the World Bank, the International Monetary Fund, the OECD, and the EU Commission together with the statistical offices. The content of the system of national accounts is a subject of scientific discussion within the International Association of Research in Income and Wealth.

The decline in human capital weakens the outlook for long-term economic growth

The deteriorated outlook for human capital weakens the outlook for long-term GDP growth directly because the output of the national economy is directly impacted by educated labour force as a production factor together with fixed capital. In addition, the education level of the labour force has an impact on economic growth, as it enables the adoption of imported new-technology fixed-capital products and the innovation of new-technology capital products in Finland through research and development.

The development of educated working-age population affects particularly the development of GDP per labour input, i.e. labour productivity. The development of labour productivity has played a crucial role in the development of GDP per capita. (See the information box “Labour productivity is mostly explained by the development of GDP per capita”).

The development of the actual GDP can be presented as the product of labour productivity (GDP/L) and labour input (L). The decrease in working-age population leads to a reduction in labour input. GDP growth will then be driven only by growth in labour productivity. However, the stagnation of the growth in the education level of working-age population and the decline in it conflict with the objective of labour productivity growth.

The ageing of the population and the stagnation of the growth in the education level of young people also put pressure on the sustainability of public finances. Ageing has caused and will cause a gradual increase in health, long-term care and pension expenditure. The decrease in educated working-age population leads to slower economic growth, which in turn will slow down growth in the general government’s tax revenue. This is in conflict with the increasing expenditure pressures and leads to an increasing structural deficit. It also has a negative impact on the outlook for the general government’s indebtedness.

Labour productivity is mostly explained by the development of GDP per capita

The average income level, GDP per capita, can be presented as the product of labour productivity (GDP/hours worked) and hours worked per capita (hours worked /population)

$$\frac{\text{GDP}_t}{\text{population}_t} = \frac{\text{GDP}_t}{L_t} * \frac{L_t}{\text{population}_t} .$$

Of the two factors on the right side of the equation, the development of labour productivity (GDP/L) has played a key role in the development of Finland’s long-term GDP per capita. This is because labour productivity may have increased (and may increase) freely, whereas working hours per capita are limited to the hours of the day, less sleep and leisure time.

On the other hand, if more resources are invested in education (or any other services), it is necessary to monitor the productivity and cost-effectiveness of the production of education services and that the resources are allocated to such education sectors that improve the labour productivity in the national economy. There are no resources to be wasted. Monitoring the output of education services based on the volume of inputs according to the national accounts, as described above, does not necessarily reveal the benefits of improving the efficiency of service production. However, improving the cost-effectiveness of service provision must not lead to deterioration of quality.⁶³

As the population ages, the growing demand for public health care and long-term care will easily create pressures to increase the number of public employees at the same time that the number of working-age people in the national economy is decreasing. The decreasing number of working-age people may lead to competition for labour between the private and public sector. In the long term, in the event of a possible labour shortage, foreign investors do not necessarily see Finland as a profitable place to invest. Growth in labour productivity would be needed both in public services and in private business.

However, the growth in labour productivity has slowed since the financial crisis in 2008–2009 and the structural economical changes in the 2010s. Labour productivity could be improved by investing both in human capital and in new fixed capital. Unfortunately, growth in productive fixed capital investments in Finland has also been slow. Finland would need incentives to invest in new fixed-capital products by buying them from abroad and by innovating them in Finland. Importing from abroad should not be forgotten, because it is not realistic to think that a small economy can innovate all new fixed-capital products in all its production industries.⁶⁴

The development of labour productivity can be explained by fixed capital and human capital per labour input

Kokkinen, Obstbaum and Mäki-Fränti (2021) and Kokkinen (2012) have shown that long-term labour productivity in Finland can be explained by fixed capital and human capital per unit of labour input:⁶⁵

$$\text{GDP}_t/L_t = (K/L)^\alpha * (H/L)^{1-\alpha}, \quad 0 \leq \alpha \leq 1.$$

Technological progress is explained in the model by the renewal of fixed capital.⁶⁶ This refers to the system of national accounts revised in 2014 and the fact that fixed capital (K) now also includes R&D investments and databases, computer software, R&D outputs supporting production, and other intellectual property products.

Human capital is interpreted in the model as the knowledge and skills the working-age population have accumulated through education and qualifications. In this case, it is possible to measure growth in human capital by means of qualifications and degrees of the working-age population, which are weighted by the volume of education services used for the specific education or training in the years of studying. The whole human input to production in the economy is equal to the hours worked by educated labour force.

The development of labour productivity is explained by growth in the human capital in the economy and growth in the fixed-capital stock, which is also affected by the technological development of fixed-capital products. Kokkinen (2012) has shown that fixed capital and human capital have grown hand in hand in Finland. The development of human capital in the economy has an impact on the ability to adopt new-technology fixed-capital products imported into Finland. Similarly, the innovation of new fixed-capital products in national R&D projects requires well-educated people who know the state-of-the-art technology. At the same time, the introduction of new-technology fixed-capital products will increase demand for educated labour. Finland should therefore pay attention to incentives to invest in new fixed-capital products imported from abroad or innovated in Finland by means of R&D investments.

In the long term, the volume of education expenditure will fall even if efforts are made to raise the level of education

As age groups are becoming smaller, the volume of expenditure on the production of public education services is decreasing. Raising the education level of 25–34-year-olds does not seem to lead to long-term growth in public expenditure, adjusted for inflation. If investments are made to raise the level of education, it should be ensured that these investments generate more GDP and increase labour productivity. The investments would thereby generate more revenue for the general government.

According to the population forecast of Statistics Finland, the generations of young people will become smaller until 2070. As the number of working-age people is decreasing and the number of pensioners is increasing, the dependency ratio is declining. This puts pressures to both reduce general government expenditure and increase general government revenue.

Raising the education level of age groups that are becoming smaller aims at improving the poor outlook for GDP growth, which would increase general government revenue. Pursuing GDP growth while the working-age population is decreasing means that a smaller number of employees should increase the value added of the national economy, i.e. labour productivity should improve. In the future, this means, for example, utilizing digitalization in the provision of private and public services. This requires investing in employees' digital skills.

In the following, we will examine how raising the level of education according to the proposal by the Ministry of Education and Culture and the Parliamentary Education and Culture Committee would roughly impact the development of final consumption expenditure volume on education services from the 2020s to 2070. This examination has taken into account the extension of compulsory education to 18 years of age. The calculations have been made on the assumptions that age groups will become smaller in accordance with the population forecast of Statistics Finland and that the volume of education expenditure per student by level of education remains unchanged from the turn of the 2020s.

In the unchanged policy scenario, the student participation rate by level of education will remain in line with the last few years' average. The extension of compulsory education will increase education expenditure, adjusted for inflation, in the early 2020s until 2025 (Figure 21). After that, as the age groups are becoming smaller, the volume of education expenditure is expected to fall throughout the review period, until 2070.

In order to raise the share of tertiary graduates to 50% as of 2030, the level of education expenditure, adjusted for cost inflation, should be raised immediately in the early 2020s by around 6%, as the proposed raising of education level requires increasing the number of higher education student places. As age groups are becoming smaller, the volume of expenditure on education services will start to decrease around 2025 and reach the 2020 level of the unchanged policy scenario around 2032. Thereafter, the expenditure will fall until 2070.

In order to raise the share of tertiary graduates to 70% as of 2040, the volume of expenditure should be increased from the beginning of the 2020s until the beginning of the 2030s to a higher level than in the other scenarios because of the increase in the number of students. The volume of expenditure would peak in 2030: it would be around 9% higher than the level of the early 2020s in the unchanged policy scenario. On the basis of the population forecast, the decrease in the number of students per age group would lead to a downward trend in the volume of expenditure in the early 2030s. The volume of expenditure would reach the 2020 level of the unchanged policy scenario around 2038 and continue to decrease throughout the entire review period, until 2070.

Regardless of the scenarios presented here on the future fall in education expenditure, it is necessary to pay attention to the efficiency of education services and the allocation of resources. When economic growth is slower, the general government's resources become scarcer. All innovations to increase the productivity of education services – however, without adversely affecting quality – would increase the effectiveness of the services. At the same time, it is also important to strive for continuous improvement in quality.

Volume, EUR billion, reference year 2010

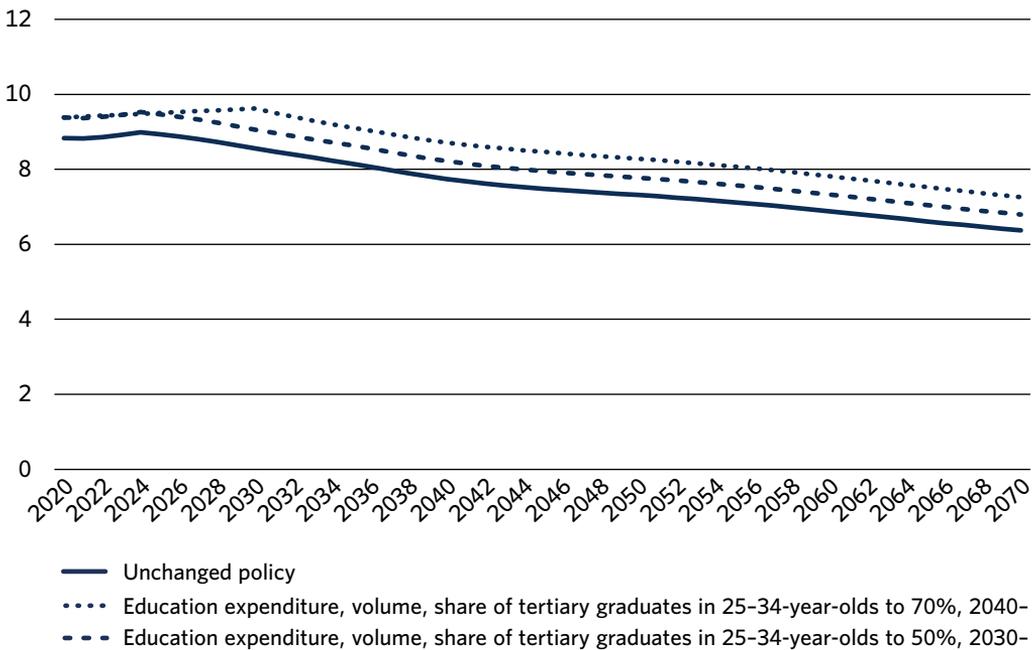


Figure 21: Increasing the share of tertiary graduates among 25–34-year-olds to 50% and 70% and the estimated impact of the increase on the volume of education expenditure in 2020–2070. Sources: Calculations by the fiscal policy monitoring function; Statistics Finland. (see end note 51)

3.3 Employment measures taken during the parliamentary term are far from the targets

As part of the objective of stabilizing the debt ratio, the Government aims to improve the employment rate to 75% by the middle of the decade and, through employment measures, to increase the number of people employed by 80,000 by the end of the decade. According to the sustainability roadmap updated in spring 2021, the impact of employment measures on public finances is EUR 1–2 billion.

After the start of the Covid-19 crisis, in autumn 2020, the Government modified the employment target (see Table 7). The original main target was to increase the number of employed people through structural measures by 60,000 by the end of 2023 and to raise the employment rate to 75%. The current target is to increase the number of employed people through structural measures by 80,000 by the end of 2029. It is good that the Government did not abandon its employment targets because of the Covid-19 crisis. The importance of an explicit employment target is underlined by the general government debt, which has grown rapidly after the Covid-19 crisis. The existence of the target may contribute to strengthening general government finances. It is also good that the targets apply to both the employment rate and structural measures.

In addition to the numeric targets, the conditions set for the employment targets have also been amended somewhat in autumn 2020 and spring 2021. The employment target set in the Government Programme did not specify a quantitative objective for the impact of employment measures on the balance of general government finances. However, the employment target set in the sustainability roadmap of spring 2021 aims to strengthen public finances by EUR 1–2 billion. It is good that the employment measures have been linked to an explicit fiscal objective. According to the Government’s sustainability roadmap, employment measures are part of the set of measures aiming to stabilize the government debt-to-GDP ratio by the mid-2020s.

The version of the sustainability roadmap published in autumn 2022 does not present an up-to-date estimate of the adjustment need leading to the debt ratio target and a set of measures consistent with it (see section 3.1). The analysis in this section therefore utilizes the sustainability roadmap of spring 2021 and the scale of employment measures presented in it (EUR 1–2 billion).

In its audit of the reconciliation of employment policy and fiscal policy published in 2020⁶⁷, the National Audit Office found that, based on the experience gained during the 2015–2018 parliamentary term, the setting of employment policy targets should be clarified and a clear overall picture should be created of the employment measures and their fiscal impacts. The development of the employment rate alone does not reveal anything about the impacts of the improved employment rate on the general government fiscal position. When the impacts of employment on general government finances are assessed, the quality of employment has a significant role. Part-time work or work that does not provide adequate income does not balance general government finances as well as full-time work with a high earnings level. In addition, although some measures taken to improve employment may be uncertain means of balancing public finances, they may contribute to other objectives. Employment measures can also be justified by the fact that they promote an individual’s wellbeing and may help them to find employment in the long term. However, this perspective should be distinguished from the short and long-term fiscal justifications. The analysis below focuses on the impacts of the Government’s employment measures on employment and general government finances.

The objective of a 75% employment rate set in the Government Programme was achieved in autumn 2022 if the changes in the way employment rate statistics are compiled are taken into account. The definitions and the methods of data collection and interview were changed in the Labour Force Survey of Statistics Finland in 2021. As a result of the changes, the number of employed people recorded decreased by 30,000, which corresponds to a change of about a percentage point in the employment rate. Consequently, the 75% objective set in the Government Programme corresponds to about 74% in the current situation. In October 2022, the employment rate trend was 74.4%.

This favourable development is presumably due to the rapid recovery of the economy from the Covid-19 crisis and the continuation of the favourable development of structural factors, which began before the crisis, for example in the case of older workers. The rapid recovery from the Covid-19 crisis has been promoted, for example, by developments in the global economy, extensive automatic stabilizers, and counter-cyclical expansionary fiscal policy in 2020.⁶⁸ However, Russia’s war of aggression in Ukraine, the growing uncertainty and the cooler business cycle halted the favourable development of employment in summer 2022.

Table 7: Employment targets in the parliamentary term

Target	Content	Schedule	Conditions
<p>Employment target of Rinne's/Marin's Government</p> <p>Source: Government Programme of 6 June 2019 and budget proposal for 2021, 5 October 2020</p>	<p>Main target:</p> <ul style="list-style-type: none"> Raising the employment rate to 75% (in the age group of 15–64). The number of employed people increases by at least 60,000. <p>Intermediate target:</p> <ul style="list-style-type: none"> The number of employed people increases by 30,000. 	<ul style="list-style-type: none"> The measures have been decided and the employment impact has been realized by the end of 2023. 	<ul style="list-style-type: none"> The measures are structural. The target is valid in normal global economic circumstances, which are reflected in the economic situation in Finland. Any employment measures that have negative employment impacts are offset by employment-boosting measures.
<p>Revised employment rate target of Marin's Government</p> <p>Source: Employment measures of the 2020 budget session, 16 September 2020; budget proposal for 2021, 5 October 2020; and sustainability roadmap, 30 April 2021</p>	<p>Main target:</p> <ul style="list-style-type: none"> The number of employed people increases by 80,000. <p>Target according to the employment measures of autumn 2020:</p> <ul style="list-style-type: none"> The number of employed people increases by 31,000–36,000 as a result of the decisions taken before and during the 2021 budget session. 	<ul style="list-style-type: none"> The decisions on measures are taken during the Government term. The impacts of the measures are realized by 2029. 	<ul style="list-style-type: none"> The target is explicitly linked to the Government's sustainability roadmap. The measures strengthen public finances by EUR 1–2 billion.

Positive development of the employment rate may affect the baseline sustainability gap scenario and thereby reduce the sustainability gap. However, according to the Ministry of Finance's autumn 2022 calculation, the sustainability gap was the same as in the spring 2021 calculation, i.e. 3% of GDP (approximately EUR 9 billion at the 2026 level).⁶⁹ On the other hand, discretionary structural employment measures do not, as a rule, affect the baseline sustainability gap scenario⁷⁰. Consequently, their impact can still be assessed directly in relation to the EUR 1–2 billion strengthening target set in the roadmap. However, to make it possible to monitor the achievement of the employment targets more transparently, the sustainability roadmap should be updated.

In addition to monitoring the employment rate target, it is important to assess the structural employment measures taken in the parliamentary term. As the development of the employment rate is affected by many factors, it is possible to implement structural measures with less regard to the business cycle. The Government has decided on and implemented a number of structural employment measures during the parliamentary term.

The Government's key employment measures have been decided mainly in the budget sessions of 2019, 2020, and 2021, in December 2020, in the government discussion on spending limits in 2021, and in February 2022. In the budget session of 2022, the Government did not separately announce any new employment measures. Instead, the Government decided

to take a number of measures to “support purchasing power”. These include a number of fixed-term measures but also a permanent reduction of early childhood education fees. As the measure is planned to be permanent and the Government decided in the budget session of 2020 to reduce early childhood education fees as an employment measure, the reduction of the early childhood education fees carried out now can also be interpreted as falling within the scope of employment measures.⁷¹ The reduction of early childhood education fees decided on in the budget session of 2020 was proposed in Government proposal 228/2022 and has an impact of 1,900 new employed persons (and EUR –91 million on public finances). Furthermore, in November 2022, the Government decided not to submit a proposal to Parliament concerning the reform of the condition for previous employment set for unemployment security. The measure was part of the February 2022 decision package and had an estimated impact of 1,500 new employed persons (and EUR 54 million on public finances).

The most effective employment measures decided so far are the removal of the right to additional days of earnings-related unemployment allowance (8,900 new employed people), the Nordic employment service model (9,500–10,000 new employed people), and the incentive model for municipalities (6,600 new employed people). It should be noted that the impacts of the measures have been calculated until the end of the 2020s. In the long term, the most important employment measure is the extension of compulsory education (13,500–15,000 new employed people). The measure that has the most significant adverse employment impact is the removal of the activation model (2,050–12,000 fewer employed people).

Table 8: Employment targets in the parliamentary term

Sets of measures	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (the ministry responsible for preparing the measure)	(C) Estimated number of new employed people mentioned in the corresponding Government proposal	(D) Net impact on public finances, € million (based on the impact estimate of the number of new employed people (column A), MoF)	(E) Net impact on public finances, € million (based on the MoF's impact estimate of the number of new employed people, NAOF) ⁷²
Decisions taken in February 2022 ⁷³	3,800-4,800	does not differ from column A	does not differ from column A	56 (excluding the TE digitalization project) ⁷⁴	43-72
Decisions taken in the budget session 2021	1,000	does not differ from column A	does not differ from column A	-76 (static impact)	-76-0 ⁷⁵
Decisions taken in the budget session 2021	11,000	40,000-44,500	does not differ essentially from column A	150	119-165
Decisions taken in 2020 (budget session and others) ⁷⁶	29,700-31,800	does not differ from column A	does not differ essentially from column A	325	189-518
Other employment-related decisions (not included in the Government's list of measures)	-15,100- -5,150	-	-	-	-555- -257
Total: Excluding negative decisions	45,500-48,500	(74,500- 82,000)	-	+455	+275- +755
Total: Including negative decisions, direct	30,400-43,400	-	-	-	-280- +498
Total: Sustainability gap pressure projection as benchmark	33,000-38,400	-	-	-	-126- +384

Table 8 presents the impacts of the measures taken by the Government on employment and general government finances by set of measures.⁷⁷ An estimated number of new employed people can be considered an employment impact if it is derived from a calculation based on justified assumptions and scientific calculation formulas or modelling. Column A presents such impact estimates of the employment measures. The estimates are largely

based on analyses made by the Ministry of Finance. Column B, in turn, presents an estimate of employment impacts based on employment potential or a scenario. The Government has published employment potential figures or scenarios, particularly on the decisions taken in the spending limits discussion in 2021. Scenarios and potential cannot be considered actual employment impact estimates because the assumptions used in the calculations or the calculation methods applied are not sufficiently justified or because the actual purpose of the calculations is to determine the size of the target group of a certain measure.⁷⁸ The estimated potential number of new employed people is based on an estimate by the ministry responsible for preparing the measure or a joint estimate by the responsible ministries.

The estimated numbers of new employed people (column C) mentioned in the Government proposals related to employment measures largely follow the impact estimates presented by the Ministry of Finance (column A).⁷⁹ This, too, confirms that the estimates by the ministry responsible for preparing the measure, or jointly by the responsible ministries, are not competing impact estimates but rather serve to outline the employment potential or scenario of the measure.⁸⁰

Treating employment potential and scenario calculations as impact estimates has led to differing estimates of the total impacts of employment measures. It is good that the Ministry of Economic Affairs and Employment provides an up-to-date list⁸¹ of employment measures. However, it is inconsistent that it is not indicated whether this list or the Government's list presents the potential (target) or impact estimates of the measures. In addition to the inconsistent comparison of data, the exclusion of employment measures with an adverse impact on employment or public finances from the publications of ministries and the Government, including the list of the Ministry of Economic Affairs and Employment, leads to differing estimates of the total impacts of the measures and even of the achievement of the targets. Inconsistency and omission of data have weakened the transparency of the assessment of the impacts of employment measures. This must be regarded as undesirable, because the Government has decided on large-scale employment measures although the targets will not yet be achieved.

The version of the sustainability roadmap published by the Government in autumn 2022 (see section 3.1) does not present a clear list of employment measures or compile the impacts of the measures. Therefore, it only contributes to a limited extent to monitoring the achievement of the employment target. However, it is good that, in the case of the decisions taken in the 2021 government discussion on spending limits, the document mentions the impact estimates of the measures, instead of their targets or potential. The Government's measures that have adverse impacts on employment or public finances are not mentioned in the document.

The (net) impacts of employment measures on public finances have been retrieved from the Ministry of Finance's memoranda and the corresponding government proposals (column D). The Ministry of Finance has not presented or been able to present the net impacts of all measures. Moreover, only the gross impact or static impact on public finances is available for certain measures. This also applies to certain government proposals. The estimated impacts of the measures on public finances are based on actual impact estimates of the number of new employed people, as it is not justified to base them on scenarios or potential. The list of employment measures maintained by the Ministry of Economic Affairs and Employment does not cover the fiscal impact of the measures, and there is no other government publication where the fiscal impacts of the measures is monitored.

The fiscal policy monitoring function has been monitoring the Government's employment measures and their impacts systematically since autumn 2020. The estimate by the fiscal policy monitoring function of the net impact of the measures on public finances is presented in column E. The estimates are based on the Ministry of Finance's calculations and estimates of the number of new employed people. The calculations are based on the same logic as those of the Ministry of Finance, but the impact of one new employed person on public finances is assumed to be EUR 18,000–25,000 per year. The aim is to take the uncertainty associated with the impacts more broadly into account.⁸² The range of variation in the data on new employed people has also been taken into account. In addition, the fiscal policy monitoring function has tried to focus on the net impact of the measures.

For reasons of transparency and comparability, Table 8 presents three different methods of summing up the impacts of the measures. The first method excludes the impacts of the Government decisions with negative effects on employment. The second method takes into account both the decisions that have a positive impact and those that have a negative impact on employment. The third method is based on the sustainability gap estimate, which serves as the foundation for the sustainability roadmap for stabilizing the debt-to-GDP ratio. The third calculation method is consistent with the sustainability gap estimate and the sustainability roadmap.

The fiscal policy monitoring function estimates the overall impact that the employment decisions taken have on public finances to be approximately EUR -280 to +498 million, taking into account the adverse employment impacts of the dismantling of the activation model and the measures included in the budget for 2020 and the employment-boosting impact of the reduction of early childhood education fees, decided in the 2022 budget session. When the employment measures decided so far are assessed in relation to the debt path presented in the sustainability roadmap of spring 2021, it should be kept in mind that the raising of the minimum age for additional days of earnings-related unemployment allowance and a fifth of the activation model have already been taken into account in the general government sustainability gap assessment. Therefore, the share of the employment measures decided remains at around EUR -126 to +384 million (in spring 2022: EUR +29 to +514 million) of the targeted total strengthening of public finances, EUR +2 to +2.5 billion, to be achieved according to the sustainability roadmap by different measures in order to stabilize the debt-to-GDP ratio. In the sustainability roadmap of spring 2021, the impact of employment measures on public finances was estimated at EUR 1 to 2 billion.

Appendix 1: Itemized impacts of the Government's employment measures

Decisions taken in February 2022

The estimated impacts of the measures decided in February 2022 on employment and general government finances are listed in Table 9. On 17 November 2022, the Government decided not to submit a proposal concerning the reform of the condition of previous employment set for unemployment security to Parliament. The most important remaining measures are therefore the obligation to seek employment in self-directed training, the increase in the income limits of student financial aid, and the continuation of the TE Administration's digitalization project.

The employment impacts of the measures are largely based on the data published by the Ministry of Finance (column A). The impact of the continuation of the TE Administration's digitalization project on employment has been taken from the related Government proposal (HE 225/2021 vp), and the figure published by the Ministry of Finance is in parentheses. The increase in the income limits of student financial aid was decided by the Government as a temporary measure already in autumn 2021 and turned into a permanent measure in February. As a permanent measure, it contributes to the Government's objective of stabilizing the general government debt ratio. However, it should be noted that the Ministry of Finance's calculation assumes that the increase in the income limits does not affect the progress of studies. Since there is no research data on how the income limits affect the progress of studies, the assumption by the Ministry of Finance can be considered justified. However, this involves a risk, as the Ministry of Finance rightly points out in the background memo. Because the reform of the requirement concerning previous employment set for unemployment security will not be implemented, the combined impact estimate of the remaining measures on the number of new employed persons is 3,800–4,800.

The Government did not publish any estimates of the employment potential or targets that would differ from these figures (column B), and the Government proposals related to the employment measures (column C) presented the same impact estimates as those given in column A.

The impacts of the employment measures on public finances are presented in columns D and E. The last column but one (D) of the table presents the (net) impacts on general government finances, as estimated by the Ministry of Finance. The Ministry of Finance published the net impacts of all measures except the continuation of the TE Administration's digitalization project. According to the Ministry of Finance, the impact of this measure is EUR 16.1 million (700 new employed people and EUR 23,000 per person), excluding the costs of the measure. However, in its background memorandum, the Ministry points out that between 2016 and 2021, appropriations totalling EUR 50.9 million have

been allocated to the measure. According to the related Government proposal, the gross impact on public finances will be EUR 3–21 million, and the development and deployment costs of the TE Administration’s digitalization project are estimated to total around EUR 98.7 million. In addition, the maintenance costs are estimated to be EUR 5–7 million a year. The gross impact of the project is not included in the total impacts on general government finances in Table 9. The net impacts of the measures listed in the table and the reform of the condition of previous employment totalled EUR 115.5 million. A margin of EUR 5 million has been left for other, smaller measures, the impacts of which have not been estimated. Thus, the total amounted to EUR 110 million. The impact of the reform of the condition of previous employment set for unemployment security (EUR 54 million) has been deducted from this, whereby the remainder is EUR 56 million.

Table 9: Decisions taken in February 2022⁸³.

Measure	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (ministry responsible for preparing the measure)	(C) Estimated number of new employed people, mentioned in the corresponding Government proposal	(D) Estimated net impact on public finances (based on the impact estimate of new employed people (A), MoF), EUR million	(E) Net impact on public finances (based on the MoF's impact estimate of new employed people, NAOF), EUR million
Subtotal	3,800–4,800	does not differ from column A	does not differ from column A	56 (excluding the TE digitalization project)⁸⁴	43–72
Obligation to seek employment in self-directed training	1 100	-	1,100 (HE 176/2022 vp) ⁸⁵	41	36–44
Permanent increase in income limits for student financial aid	2,500	-	2,500 (HE 156/2022 vp)	12.2	12.2
Continuation of TE Administration's digitalization project	200–1,200 ⁸⁶ (700)	-	200–1,200 (HE 225/2021 vp)	3–21 (16.1) (gross)	-14- +7
Restrictions on the use of 100% pay subsidy	(minor)	-	Part of the reform of pay subsidies. See government proposal HE 175/2022 below.	10.3	10.3
Other measures	minor/not estimated	-	-	-2 / not estimated	-2 / not estimated

The estimate by the fiscal policy monitoring function of the net impact on public finances is shown in column E. As described above, the estimate aims to take broadly into account the uncertainty associated with the calculations.⁸⁷ In the case of the TE Administration's digitalization project, the project costs should be deducted from the gross impact. Assuming that the costs estimated in the Government proposal (EUR 98.7 million) are subject to linear depreciation and that the useful time is ten years⁸⁸ (the annual depreciation amounts to EUR 10 million) and adding the estimated annual maintenance costs (EUR 5–7 million), the amount to be deducted from the gross impact would total EUR 15–17 million. Thus, the net impact would be EUR -14 to +7 million. Adding up the net impacts of all measures (taking into account the suspension of the reform of the condition of previous employment) and excluding the above-mentioned margin for other measures, the net impact totals EUR 43–72 million.

Decisions taken in the budget session 2021

In connection with the 2022 budget proposal, the Government announced three employment measures: raising the tax credit for work income for people over 60 years of age, raising the income limits for student aid, and a fast lane to employment-based immigration. The impacts of the measures are listed in Table 10. It should be noted that the increase in the income limits for student financial aid was originally intended as a temporary measure and turned into a permanent measure in February. Therefore, the impact of the measure assessed at the time is given in parentheses and not taken into account in the subtotal. The impact of a fast lane to employment-based immigration has not been estimated.

The gradual increase in the tax credit for work income for people over 60 years is the only employment measure decided in the budget session that has been estimated and that has a permanent impact on public finances. The measure was originally part of the package for people over the age of 55, and it was preliminarily estimated to have an impact of 500 new employed people. The estimate was revised in autumn 2021 to 150–650 new employed people. As the details of the measure were specified, the estimate was revised again and is now 1,000 new employed. The current estimate has been taken into account in this calculation.

The total impact is estimated to be 1,000 new employed. The Government did not publish any estimates of the employment potential or targets that would differ from these figures (column B), and the Government proposals related to the employment measures (column C) presented the same impact estimates as those given in column A.

According to an estimate by the Ministry of Finance, the fiscal impact of increasing the tax credit for work income for people over 60 years is negative (column D). The calculation focuses on the static impact and does not take into account any positive dynamic impacts. However, the dynamic impacts can be expected to be limited, taking into account the characteristics of the target group, and even positive dynamic impacts would not be able to turn the overall fiscal impact into positive.⁸⁹ Column E aims to take into account the positive dynamic impacts of the measures. The lower limit of the net impact of the measure is its static impact, while the upper limit is based on the assumption that the dynamic impacts would offset the negative static impact. This can be regarded as an overoptimistic assumption, and the actual dynamic net impact lies between the extremes.

Table 10: Decisions taken in the 2021 budget session

Measure	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (ministry responsible for preparing the measure)	(C) Estimated number of new employed people, mentioned in the corresponding Government proposal	(D) Estimated net impact on public finances (based on the impact estimate of new employed people (A), MoF), EUR million	(E) Net impact on public finances (based on the MoF's impact estimate of new employed people, NAOF), EUR million
Subtotal	1,000	does not differ from column A	does not differ from column A	-76 (static impact)	-76-0
Gradual increase in the tax credit for work income for people over 60 years⁹⁰	1,000	-	1,000 (HE 153/2022 vp)	-76 (static impact) ⁹¹	-76-0 ⁹²
Increase in income limits for student financial aid⁹³	(2,000)	-	-	(+15)	-
Fast lane for work-based immigration	no estimate	-	-	no estimate	no estimate

Decisions taken in the budget session 2021

In its mid-term review, the Government decided on a number of employment measures. These measures include, for example, the transfer of employment and business services to municipalities and, in connection with the transfer, the creation of a funding model that encourages municipalities to develop their activities to promote employment; work-based immigration; Työkanava Ltd, established to employ people with impaired capacity to work; and the reform of continuous learning. The measures are listed in Table 11.

The employment impacts of the measures are based on the data published by the Ministry of Finance (column A). According to the preliminary estimates included in the Ministry of Finance's memorandum⁹⁴, the employment impact of the measures is approximately 11,000 new employed people.

The targets set for employment measures or the employment potential, in turn, can be found in column B. The estimated potential number of new employed people is based on an estimate by the ministry responsible for preparing the measure or a joint estimate by the responsible ministries. With some measures, the estimates differ from column A only to a minor degree, but with other measures, the differences are greater.

For example, in the case of the transfer of TE services to municipalities, the estimate of the Ministry of Economic Affairs and Employment includes the Ministry of Finance's impact estimate of 6,600 new employed people and a rough estimate of 0–3,000 new

employed people resulting mainly from the improved availability of services. The total impact of the measure would thus be 7,000–10,000 new employed people, which does not differ fundamentally from the impact estimated by the Ministry of Finance.

However, the estimates differ fundamentally in the case of work-based immigration, continuous learning, and the pay subsidy and work ability programme. For work-based immigration, the impact estimated by the Ministry in column A is 1,500, whereas the figure of the Ministry of Economic Affairs and Employment in column B is 10,000.

The immigration-related measure can be considered to include, in particular, the speeding up the processing of residence permits (HE 114/2022) and the streamlining of the immigration of students and researchers (HE 232/2021). According to HE 114/2022, the number of new employed people achieved through the measure is 1,400, whereas HE 232/2021 does not include an estimated impact on employment. In addition, the measure related to work-based immigration involves various projects, such as the Talent Boost programme and the related sub-projects, country branding and attracting experts, and the working life diversity programme. There are no impact estimates of these. It should also be noted that it may be impossible to estimate the employment impacts of these projects. In addition, projects are often temporary in nature, and it may be difficult to achieve permanent structural impacts through them. In the Roadmap for Education-based and Work-based Immigration 2035, it is also stated that “The post-2030 target is an increase of at least 10,000 per year.” The figure in column B should therefore be interpreted as a target rather than an impact estimate.

With regard to the reform of continuous learning, the figure published by the Ministry of Finance is 1,000 new employed people (column A), whereas the figure published by the Ministry of Education and Culture is 10,000–10,500 (column B). In the list maintained by the Ministry of Economic Affairs and Employment, the figure is as high as 11,000.⁹⁵ It is rightly argued in the memorandum of the Ministry of Education and Culture related to the measure that continuous learning would, among other things, prevent unemployment. However, the assumptions on which the calculation is based have not been sufficiently justified, and they are not based on research literature. Therefore, the calculation in the memorandum cannot be considered an impact estimate, but rather, it describes the employment potential of the measure. The reform of continuous learning is laid down in government proposal HE 76/2021. The reasoning in HE 76/2021 on the impact of the reform of continuous learning on employment is largely in line with the memorandum of the Ministry of Education and Culture for the 2021 government discussion on spending limits, from which the scenario figure in column B is taken. However, the scenario figure is not mentioned in the government proposal.

With regard to the work ability programme and pay subsidy reform, the impact estimate published by the Ministry of Finance in spring 2021 is 600 new employed people (column A), whereas the potential outlined by the sectoral ministries is 5,500–6,500 (column B). The work ability programme consists of 22 projects to be implemented in 2019–2023. The quantitative impact of the projects on employment has not been published. However, the pay subsidy reform has been defined in government proposal HE 175/2022, where its impact is estimated to be 500–1,000 new employed people.

Finally, there are also measures for which the ministry responsible for the preparation has stated clearly that the calculation must be understood as a rough estimate of the employment potential and not as an actual impact estimate. As regards the prevention

of disability pensions and sickness absences, for example, the potential published by the Ministry of Social Affairs and Health in spring 2021 is 2,500 new employed people (column B), whereas the Ministry of Finance has not published any impact estimate. In the memorandum the Ministry of Social Affairs and Health has prepared on the measure, it is clearly stated that “such a (...) calculation, in which the impact estimate of the intervention (...) is arbitrary, describes above all the maximum employment potential of the prevention of disability pensions”.

Adding up the employment potential and scenarios of the measures gives the figure published by the Government, i.e. 40,000–44,500 new employed people.

The government proposals related to employment measures and the estimated impacts on employment set out in them are listed in column C. The estimates follow largely the figures published by the Ministry of Finance in spring 2021. At the time of writing this report, the transfer of TE services to municipalities is the only measure on which a figure published by the Ministry of Economic Affairs can be found in the corresponding government proposal. The fact that the figures presented in the government proposal largely follow the impact estimates published by the Ministry of Finance can be considered to confirm that the figures listed in column B are not competing impact estimates but represent the employment potential or scenarios. It is not consistent to treat the employment potential and scenario calculations of the measures as impact estimates. This should also be considered in the calculation of the fiscal impacts of the measures.

Table 11: Decisions taken in the 2021 Government discussion on spending limits

Measure	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (ministry responsible for preparing the measure)	(C) Estimated number of new employed people, mentioned in the corresponding Government proposal	(D) Estimated net impact on public finances (based on the impact estimate of new employed people (A), MoF), EUR million	(E) Net impact on public finances (based on the MoF's impact estimate of new employed people, NAOF), EUR million
Subtotal	11,000	40,000–44,500	does not differ essentially from column A	150	119–165
Työkanava Ltd	1,000	does not differ from column A (MoF)	1,000 (HE 198/2021 vp)	0	could not be estimated
Transfer of employment and business services to municipalities (includes the incentive model for municipalities)	6,600	7,000–10,000 (MEAE)	7,000–10,000 (HE 207/2022 vp)	150 (HE 207/2022: 158–226)	119–165
Pay subsidy and work ability programme	600	5,500–6,500 (MSAH, MEAE)	500–1,000 (HE 175/2022 vp) ⁹⁶	14 (gross)	could not be estimated
Work-based immigration	1,500	10,000 (MEAE)	1,400 (HE 114/2022 vp) ⁹⁷	14 (gross)	could not be estimated
Reform of continuous learning	1,000	10,000–10,500 (MEC)	No estimate (HE 76/2021) ⁹⁸	23 (gross)	could not be estimated
Prevention of disability pensions and sickness absences	-	2,500 (MSAH)	-	-	-
Accelerating procurement	-	2,000 (MEAE)	No estimate. ⁹⁹	-	-
Integration	-	2,000 (MEAE)	No estimate (HE 208/2022) ¹⁰⁰	-	-

The impacts of employment measures on public finances are presented in columns D and E. Column D presents the impacts on public finances as estimated by the Ministry of Finance. The Ministry of Finance published the net impact of the transfer of TE services to municipalities. Government proposal HE 207/2022 follows the same calculation formula, and the estimate published by the Ministry of Finance in spring 2021 corresponds to the lower limit of the estimate given in it. For other measures, gross impacts, for example, have been published.

The estimate by the fiscal policy monitoring function of the net impact on public finances is based on the Ministry of Finance's estimate of the number of new employed people. The net impact of the measures is EUR 119–165 million. It should be noted that for many of the measures, it was not possible to estimate the net impact.

Decisions taken in 2020 (budget session and others)

In the budget session of 2020, the Government published a package of employment measures that included a number of previously decided measures as well as a number of new measures. In addition, in December 2020, the Government decided on an employment package for people aged over 55, including the removal of the right to additional days of earnings-related unemployment allowance. In addition to this package, the most important employment measures that help to bend the growth curve of the debt ratio by the end of the decade include the raising of the minimum age for additional days of earnings-related unemployment allowance and the Nordic labour market service model. All of the measures are listed in Table 12.

The employment package for people aged over 55 originally included the following measures: removal of the right to additional days, readjustment security, increase in the tax credit for work income for people aged over 60, pay subsidy for people aged over 55, and the proposals of the rehabilitation committee. Of these, the increase in the tax credit for work income for people aged over 60 has been taken into account in the decisions of the 2021 budget session. Pay subsidy for people aged over 55 has become part of the pay subsidy reform (see the last row of the table), which has been taken into account in the decisions of the 2021 government discussion on spending limits. Of the original estimate of the number of new employed persons (10,300), 9,400 thus remains (column A). The impact of raising the minimum age for additional days of earnings-related unemployment allowance is 6,500–7,000 and that of the Nordic labour market service model is 9,500–10,000 new employed people. Taking into account the revision of the calculations and the correct targeting of individual measures, the Ministry of Finance's impact estimate of the number of new employed persons totals 29,700–31,800.

The ministries responsible for the measures have not published estimates that would differ from those listed above (column B).¹⁰¹ It is also noteworthy that the figures mentioned in the Government proposals related to the employment measures (column C) are largely the same as the impact estimates calculated by the Ministry of Finance (column A).

The impacts of the employment measures on public finances according to the Ministry of Finance's estimate are listed in column D. According to the list, the most important measure from the perspective of public finances is the removal of the right to additional days of earnings-related unemployment allowance (EUR 190 million). The net impact of all these measures on public finances totals approximately EUR 325 million. The estimate by the fiscal policy monitoring function of the net impacts on public finances is presented in column E, and it totals EUR 189–518 million.

Finally, it must be stated that the impacts of the extension of compulsory education on employment and public finances have been calculated for 2029. The cost of this measure will then still exceed the benefit derived from it. In the longer term, however, the number of the new employed people will grow, the impact of the measures on public finances will become positive, and its impact on employment will be significant (background report of the Economic Policy Council 2018). This shows that a measure can strengthen public finances in the long term although it does not contribute to stabilization of government debt in the medium term.

Table 12: Decisions taken in 2020 (budget session and others)

Measure	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (ministry responsible for preparing the measure)	(C) Estimated number of new employed people, mentioned in the corresponding Government proposal	(D) Estimated net impact on public finances (based on the impact estimate of new employed people (A), MoF), EUR million	(E) Net impact on public finances (based on the MoF's impact estimate of new employed people, NAOF), EUR million
Subtotal	29,700–31,800	does not differ from column A	does not differ from column A	325	189–518
Employment package for people aged over 55, 17 December 2020 (e.g. removal of the right to additional days of earnings-related unemployment allowance)¹⁰²	9,400 (8,900)	-	9,300 (HE 62/2022 and HE 152/2021) ¹⁰³	200 (190)	160–223 (only the removal of additional days, no other estimates given)
Raising the minimum age for additional days of unemployment allowance	6,500–7,000	-	6,500–7,000 (HE 83/2019 vp)	-	117–175
Nordic employment service model	9,500–10,000	-	9,500–10,000 (HE 167/2021 vp)	140 (HE 167/2021 vp)	101–180
Reduction in the fees for early childhood education	2,500–3,600	-	2,900 (HE 198/2020 vp)	-100	-100– -66
Extension of compulsory education	1,600 (long-term impact on employment 13,500–15,000)	-	No estimate (HE 173/2020) ¹⁰⁴	-	-89– +6
Linear model of partial disability pension (suspended)	(200)	-	-	-	no estimate
Reform of adult education allowance	200	-	No estimate (HE 15/2020)	-	no estimate
Reform of pay subsidies¹⁰⁵	(500–1,000)	-	-	-	-

Other employment-related decisions

The Government's package of employment measures and the list of employment measures maintained by the Ministry of Economic Affairs and Employment do not include the Government measures that have an adverse impact on employment¹⁰⁶. At the beginning of the parliamentary term, in 2019, the Government decided to remove the benefit cuts of the activation model, and in connection with the 2019 budget session, it implemented increases in the basic social security and tax changes. The measures are listed in Table 13. In addition, the Government decided in the 2022 budget session to raise the income limits for early childhood education fees. The measure has a positive impact on employment and a negative impact on public finances.¹⁰⁷ According to government proposal HE 228/2022, the objective of the measure is to increase incentives to work and to support "families with children because of the rapid increase in the cost of living and the price of electricity". However, the measure is permanent and also very similar to the reduction of early childhood education fees, which was decided in the 2020 budget session and which is considered to be an employment measure. At the time of writing the report, the measure had not been included in the Government's lists of employment measures, and no up-to-date or comprehensive list was available from the Government. For this reason, the measure has been taken into account in the section "Other employment-related decisions". The total impact of the measures is 5,150–15,100 fewer employed people. Their net impact on public finances is negative.

Table 13: Other employment-related decisions (not included in the Government's list)

Measure	(A) Impact estimate of the number of new employed people (MoF, other ministries, other actors)	(B) Estimated potential number of new employed people (ministry responsible for preparing the measure)	(C) Estimated number of new employed people, mentioned in the corresponding Government proposal	(D) Estimated net impact on public finances (based on the impact estimate of new employed people (A), MoF), EUR million	(E) Net impact on public finances (based on the MoF's impact estimate of new employed people, NAOF), EUR million
Subtotal	-15,100- -5,150	-		-	-555- -257
Reduction of early childhood education fees in the 2022 budget session	1,900	-	1,900 (HE 228/2022 vp)	-91	-91
Removal of the benefit cuts of the activation model	-12,000- -2,050 (working group memo and Economic Policy Council)	-	5,000-12,000 (HE 124/2017, HE 80/2019)	-	-339- -76
Budget proposal for 2020 (mainly increases in basic social security and tax changes)¹⁰⁸	-5,000 (Parliament)	-	-	-	-125- -90

Appendix 2: Robustness of the output gap produced using the HP filter

The output gap produced using the HP filter depends on the lambda value of the filter. In literature, the lambda value is as a rule assumed to be 1,600 in quarterly time series, as proposed by Hodrick and Prescott. However, the use of the value in such a straightforward manner has been criticized because it does not take the individual characteristics of the time series into account. Gäddnäs¹⁰⁹ has strived to take the individual characteristics of a quarterly GDP time series into account and has calculated the optimal lambda value to be 27,594. Figure 22 shows that the output gap estimates produced by means of the HP filter are temporally close to each other regardless of the lambda value, especially in 2019–2022. The output gap estimate turns positive in 2021 regardless of the lambda value.

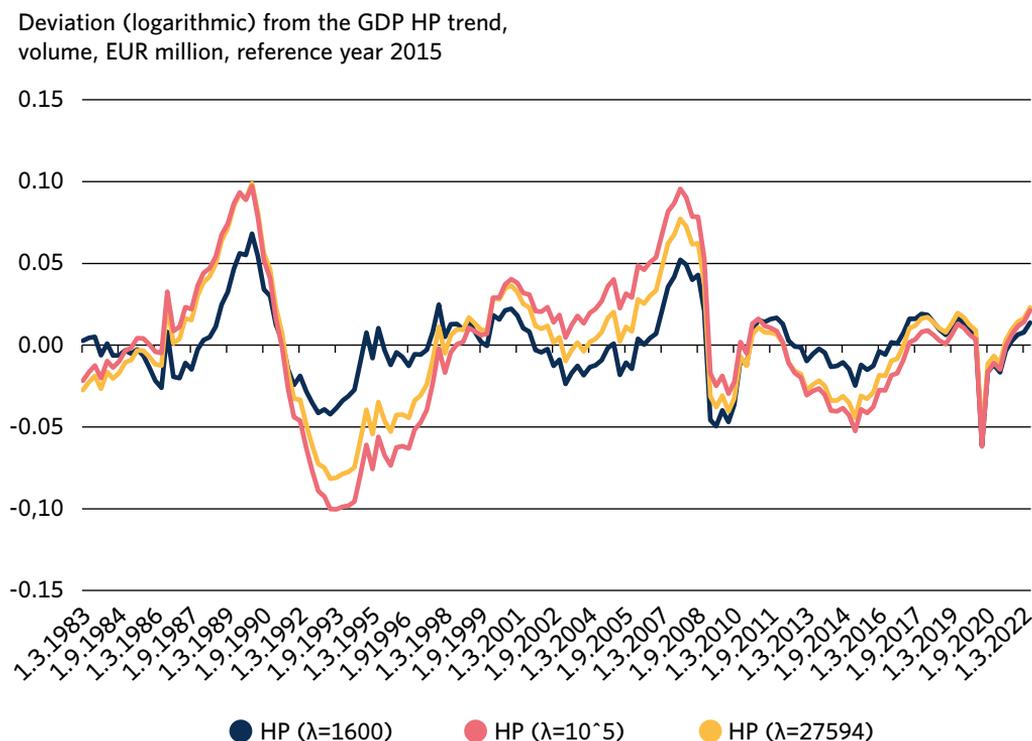


Figure 22: Output gap estimates calculated by means of the HP filter with different lambda values

References

- 1 The change was related to the methodological change related to the statistics on the interest subsidy loans approved by the Housing Finance and Development Centre of Finland (ARA) for social housing construction. The change was also carried out retroactively in the debt time series starting from 2000. The ARA interest subsidy loans will be presented in future under general government financial assets and liabilities. The methodological change concerns such interest subsidy loans granted to rental dwellings and right-of-occupancy dwellings that are approved by ARA. The basis for the methodological change is the conditions of ARA interest subsidy loans that restrict the renting of dwellings and the management of right-of-occupancy dwellings for a fixed period. Due to these conditions, the loans for rental dwellings and right-of-occupancy dwellings will be presented in the statistical description of the general government. Before the change, ARA interest subsidy loans were mainly recorded in the statistics outside the general government. See the Statistics Finland revision release of 28 June 2022.
- 2 The Fiscal Compact has been implemented through the Act on the implementation of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, the implementation of Treaty provisions of a legislative nature as well as requirements concerning multiannual budgetary frameworks (869/2012).
- 3 Ministry of Finance. 2020. General Government Fiscal Plan for 2021–2024.
- 4 Ministry of Finance. 2020. General Government Fiscal Plan for 2021–2024.
- 5 Fiscal policy monitoring assessment on the management of general government finances, spring 2020.
- 6 Fiscal policy monitoring assessment on the management of general government finances, spring 2021.
- 7 The Government has interpreted that the validity of the exceptional circumstances stems from the validity of the escape clause of the EU Stability and Growth Pact. The validity of the EU’s general escape clause has later been extended until 2023.
- 8 Ministry of Finance. General Government Fiscal Plan for 2023–2026. Publications of the Ministry of Finance 2022:27.
- 9 National Audit Office of Finland. 2019. Medium-term projections in the planning of general government finances. Audit report 17/2019.
- 10 National Audit Office’s Annual Report 2020.
- 11 Ministry of Finance 2022. Developing the steering of general government finances, Publications of the Ministry of Finance 2022:71.
- 12 On 20 March 2020, the EU Commission issued a communication on the activation of the general escape clause of the Stability and Growth Pact. After this, on 23 March 2020, the Ministers of Finance of the EU countries issued a common statement where they agreed with the Commission’s assessment that the conditions for the activation of the general escape clause of the Stability and Growth Pact were fulfilled.
- 13 Treaty on Stability, Coordination and Governance in the Economic and Monetary Union.
- 14 National Audit Office of Finland. 2021. Separate report R 22/2021 vp: Fiscal policy monitoring report 2021.
- 15 Fiscal policy monitoring assessment on the management of general government finances, spring 2022.
- 16 The Government Programme defines the key objective of the spending limits rule and the principles steering compliance with the spending limits of the parliamentary term. Generally speaking, the principles of the spending limits system have been very stable. The principles can be roughly divided into five categories: (1.) Objective of the spending limits rule (2.) Expenditure falling outside the spending limits (3.) Principles steering changes to the spending limits (4.) Flexibility and provisions included in the spending limits (5.) Circumvention of the spending limits
- 17 Statistics Finland’s revision release of 28 June 2022: An exceptional revision in the financial accounts statistics in the releases of 28 June 2022. The reason is the methodological change made to the treatment of ARA interest subsidy loans.
- 18 European Fiscal Board (2018), Annual Report 2018, EFB: Brussels.

- 19 EU Fiscal and Economic Governance Review: Contribution from the Network of Independent EU Fiscal Institutions, 2021.
- 20 Striffler, M. and Kokkinen, A. 2021a. A monthly business cycle heatmap for the Finnish Economy. Unpublished manuscript, fiscal policy monitoring function, NAOF
- 21 Striffler, M. and Kokkinen, A. 2021a.
- 22 Kajanoja, L., 2018. Kustannuskilpailukyky parantunut kaikkien keskeisten mittareiden mukaan. Euro&Talous, 19 December 2018.
- 23 Striffler, M. and Kokkinen, A. 2021b: Forecast for the Finnish business cycle heatmap. Unpublished manuscript, fiscal policy monitoring function, NAOF.
- 24 Kajanoja, L., 2018. Kustannuskilpailukyky parantunut kaikkien keskeisten mittareiden mukaan. Euro&Talous, 19 December 2018.
- 25 Striffler, M. and Kokkinen, A. 2021b
- 26 Striffler, M. and Kokkinen, A. 2021b.
- 27 Striffler, M. and Kokkinen, A. 2021b.
- 28 Russia's war in Ukraine is stifling Finland's economic recovery, Bank of Finland Bulletin, 21 June 2022.
- 29 World Economic Outlook, October 2022.
- 30 Pönkä, Harri and Sariola, Mikko (2021): Output gaps and cyclical indicators: Finnish Evidence. BoF Economics Review, No. 6/2021.
- 31 Orjasniemi, Seppo and Kuusela, Annika (2021): Output gap estimates for Finland with multivariate filters.
- 32 Gäddnäs, N. 2022: Unpublished calculation produced for this report.
- 33 See, for example, Du Toit, Leon (2008). Optimal HP filtering for South Africa. Stellenbosch Economic Working Papers: 07/08.
- 34 See Larch, M., Malzubris, J. (2022). Exceptional times and old habits. VoxEU column 14 Oct 2022. <https://cepr.org/voxeu/columns/exceptional-times-and-old-habits-eu-fiscal-policies-2021>, haettu 17.10.2022
- 35 See Gourinchas, Pierre-Olivier (2022). Policymakers Need Steady Hand as Storm Clouds Gather Over Global Economy, IMF Blog, 11 Oct 2022. <https://www.imf.org/en/Blogs/Articles/2022/10/11/policymakers-need-steady-hand-as-storm-clouds-gather-over-global-economy>, retrieved on 17 October 2022
- 36 See e.g. Blanchard, O., Amighini, A. and Giavazzi, F. 2021. Macroeconomics: A European perspective.
- 37 European Fiscal Board (2021). Assessment of fiscal stance appropriate for euro area.
- 38 The variation (standard deviation) of the business cycle indicator of the heatmap has been scaled to be comparable with the variation (standard deviation) of the output gap. (See Striffler, M. and Kokkinen, A. 2021c) The estimates based on the output gap method of both the business cycle and the cyclically adjusted structural primary balance may be revised later even to a significant extent.
- 39 The prediction interval has been formed on the basis of the forecasts of 17 forecasters other than the Ministry of Finance and the statistical T-test variable. These forecasters are Akava Works, Danske Bank, the Research Institute of the Finnish Economy (ETLA), the Finnish Centre for Pensions, the European Commission, Handelsbanken, the International Monetary Fund (IMF), MuniFin, Labore, Nordea, the OECD, OP Group, Pellervo Economic Research (PTT), POP Bank, the Mortgage Society of Finland (Hypo), the Bank of Finland, and Savings Bank. All of these forecasters do not produce forecasts in the same scope as the Ministry of Finance.
- 40 The NAOF's fiscal policy monitoring assessment on the management of general government finances, spring 2021.
- 41 National Audit Office (2019): Audit Report 16/2019, Sustainability assessments of general government finances in the knowledge base of economic policy
- 42 See, for example, Ministry of Finance 2020: Economic Survey, Autumn 2020, and National Audit Office (2022): Follow-up report: Sustainability assessments of general government finances in the knowledge base of economic policy.
- 43 See Hallituksen vuosikertomus 2021, Valtioneuvoston kanslian julkaisuja 2022:23.
- 44 When guarantees and general government debt are examined at the same time, it should be noted that a part of the guarantees has also been regarded as general government debt, especially after the methodological change Statistics Finland made in 2022 regarding ARA loans.

- 45 National Audit Office (2018): Audit Report 4/2018: General government contingent liabilities. National Audit Office (2020): Follow-up report: General government contingent liabilities.
- 46 See opinions PeVL 15/2018 vp and PeVL 65/2018 vp of the Constitutional Law Committee.
- 47 Expert opinions submitted by the National Audit Office on the reform to Parliament in spring 2021 (to the Commerce Committee on 19 April; to the Administration Committee on 11 March; to the Finance Committee on 9 March; to the Social Affairs and Health Committee on 2 March; to the Commerce Committee on 10 February).
- 48 See National Audit Office (2020): National Audit Office's Annual Report to Parliament 2020.
- 49 Ministry of Finance (2022): Final report of the working group on the development of the steering of general government finances.
- 50 See, e.g. National Audit Office (2020): Fiscal policy monitoring report 2020.
- 51 Kokkinen, A. (2012). On Finland's Economic Growth and Convergence with Sweden and the EU15 in the 20th Century. Research Report 258. Helsinki: Statistics Finland <http://tilastokeskus.fi/tup/julkaisut/tiedostot/978-952-244-334-2.pdf>
- 52 Kokkinen, A., Obstbaum, M., and Mäki-Fränki P. (2021). Bank of Finland's Long-Run Forecast Framework with Human Capital. *BoF Economics Review*, 10/2021; see also Mäki-Fränki, P., Kokkinen, A. and Obstbaum, M. (2021). Finland's new long-term forecast suggests GDP growth will be more subdued. *Bank of Finland Bulletin* 5/2021.
- 53 Korkeakoulutus ja tutkimus 2030-luvulle. Taustamuistio korkeakoulutuksen ja tutkimuksen 2030 visiotyölle, p. 22, 24 October 2017. <https://okm.fi/documents/1410845/4177242/visio2030-taustamuistio.pdf/b370e5ec-66d3-44cb-acb9-7ac4318c49c7/visio2030-taustamuistio.pdf?t=1508827794000>. Retrieved 26 October 2022. This objective has also been presented later in the Government Programme and in the Government's Education Policy Report.
- 54 Calculations by the fiscal policy monitoring function; Kokkinen, A., Obstbaum, M., and Mäki-Fränki P. (2021). Bank of Finland's Long-Run Forecast Framework with Human Capital, *BoFER* 10/2021; Kokkinen, A. (2012). On Finland's Economic Growth and Convergence with Sweden and the EU15 in the 20th Century; Statistics Finland: Education statistics, Population statistics, Population projection, National Accounts.
- 55 Committee report SiVM 19/2021 vp –VNS 1/2021 vp, p. 26.
- 56 OECD, Education at a Glance 2022, link to the annex table concerned <https://stat.link/zke5wq>, retrieved on 26 October 2022. According to the table, 40% of 25–34-year-olds in Finland have tertiary-level qualifications in 2021. The figure is based on the Labour Force Survey, which is a sample survey. The equivalent shares in Japan, Canada and South Korea are reported to be 65%, 66% and 69%, respectively. See also Kalenius, A. (2022). Koulutustasovertailu työvoimatutkimuksen uudistuttua. Opetus- ja kulttuuriministeriön politiikka-analyysijä 2022:1 I KOULUTUS.
- 57 Kalenius, A., Karhunen, H. and Hyvönen, I. (2022). Ensikertalaisten pääsy korkeakouluun. Opetus- ja kulttuuriministeriön politiikka-analyysijä 2022:2 I KOULUTUS.
- 58 Solow, R. M. (1957). Technical Change and the Aggregate Production Function, *Review of Economics and Statistics*, vol. 39, 1957: 3, pp. 312–320.
- 59 See for example Nelson, Richard R., Phelps, Edmund S. (1966). Investment in Humans, Technological Diffusion, and Economic Growth. *American Economic Review*, 56, 2 (May), pp. 69–75; Romer, Paul M. (1986). Increasing Returns and Long-Run Growth, *Journal of Political Economy*, vol. 94, 1986:5, pp. 1002–37; Rebelo, Sergio (1991). Long-Run Policy Analysis and Long-Run Growth, *Journal of Political Economy*, vol. 99, 3, pp. 500–21; Barro, Robert J. and Sala-i-Martin, Xavier (1999, 1995). *Economic Growth*. The MIT Press, Cambridge, Massachusetts, 1999. Originally published by McGraw-Hill, Inc., 1995; Galor Oded (2005). From Stagnation to Growth: Unified Growth Theory. In Aghion P., Steven N. Durlauf (Eds), *Handbook of Economic Growth*, vol 1A, Elsevier B.V., Amsterdam, The Netherlands, Chapter 4, pp. 171–293; Benhabib, Jess, Spiegel, Mark M. (2005). Human Capital and Technology Diffusion. In Aghion, P., Durlauf, S. N. (Eds) *Handbook of Economic Growth*, vol 1A, Elsevier B.V., Amsterdam, The Netherlands, Chapter 13, pp. 936–966.
- 60 See e.g. Barro, R. J. (1991). Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics*. 106, 1991:2, pp. 407–43; Levine, R. and D. Renelt (1992). A Sensitivity Analysis of Cross-Country Growth Regressions. *American Economic Review*. 82, pp. 942–63; Barro, R. J. and X. Sala-i-Martin (1999, 1995) *Economic Growth*. The MIT Press, Cambridge, Massachusetts, 1999. Originally published by McGraw-Hill, Inc., 1995.

- 61 See e.g. Lau, L. J., Jamison, D.T. and Louat, F.F. (1991). Education and Productivity in Developing Countries: An Aggregate Production Function Approach. Policy Research Working Paper # 612, World Bank; Islam, N. (1995) Growth Empirics: A Panel Data Approach. Quarterly Journal of Economics, 110, No. 4, pp. 1127–70; Bosworth, Barry P., Collins, Susan M. (2003). The Empirics of Growth: An Update. Brookings Papers on Economic Activity, 2:2003, pp. 113–179.
- 62 SNA 2008 (2009). System of National Accounts 2008, Commission of the European Communities-Eurostat, International Monetary Fund, OECD, United Nations, World Bank, Brussels/Luxembourg, New York, Paris, Washington D.C.
- 63 For monitoring the development of the productivity of education services, see, for example, Pursiainen, H., Pääkkönen, J. and Seppälä, T. (2011). Julkisten palvelujen tuottavuus seurannan kehittäminen. Prime Minister's Office Reports 14/2011.
- 64 Mäki-Fränti, P., Kokkinen, A. and Obstbaum, M. (2021). Finland's new long-term forecast suggests GDP growth will be more subdued. Bank of Finland Bulletin 5/2021.
- 65 Kokkinen, A., Obstbaum, M., and Mäki-Fränti P. (2021). Bank of Finland's Long-Run Forecast Framework with Human Capital. BoF Economics Review, 10/2021; Kokkinen, A. (2012). On Finland's Economic Growth and Convergence with Sweden and the EU15 in the 20th Century. Research Report 258. Helsinki: Statistics Finland <http://tilastokeskus.fi/tup/julkaisut/tiedostot/978-952-244-334-2.pdf>.
- 66 Romer, P. M. (1987). Growth Based on Increasing Returns Due to Specialization, American Economic Review, vol. 77, 1987:2, pp. 56–62; Boucek, R., de la Croix, D. and Licandro, O. (2011). Vintage Capital Growth Theory: Three Breakthroughs. Barcelona GSE Working Paper Series. Working Paper n° 565; Solow R., Tobin, J, Von Weizsacker, C. and Yaari, M. (1966). "Neoclassical growth with fixed factor proportions," Review of Economic Studies 33, 79–115; Solow R. (1960). "Investment and technological progress." In K. Arrow, S. Karlin and P. Suppes (eds.), Mathematical Methods in Social Sciences 1959, 89–104. Stanford University Press.
- 67 Fiscal policy audit report: Reconciliation of fiscal policy and employment policy. Audit report of the National Audit Office 9/2020.
- 68 Expansionary fiscal policy may have permanent positive impacts on the economy and employment. See Lainà, P. 2021. Koronaelvytyksen hystereesivaikutus. Kansantaloudellinen aikakauskirja 117, 2/2021.
- 69 It should be taken into account that the objective of the sustainability roadmap is to bend the growth curve of the general government debt ratio by the mid-2020s. The objective does not apply to the level of the general government debt ratio, which rose due to the Covid-19 crisis.
- 70 There are exceptions to this, which have been taken into account separately in the calculations of the report. See the last row of Table 2.
- 71 See also appendix I.
- 72 More information on the calculation of the impacts of the employment measures on public finances is available in the following fiscal policy monitoring reports: Fiscal policy monitoring report 2020, December 2020; Fiscal policy monitoring assessment on the management of general government finances, May 2020.
- 73 On 17 November 2022, the Government decided not to submit the proposal concerning the reform of the condition of previous employment set for unemployment security to Parliament. The measure in question has therefore been removed from here.
- 74 The figure was originally EUR 110 million. The information is from the General Government Fiscal Plan, Publications of the Ministry of Finance 2022:27. EUR 54 million has been deducted from the EUR 110 million because the proposal concerning the reform of the condition of previous employment set for unemployment security was not submitted to Parliament.
- 75 The lower impact limit is based on the MoF's static estimate. The dynamic impact of the measure on public finances is not presented in the Government proposal. At best, the net impact could be close to zero. (See the opinion submitted by the Labour Institute for Economic Research LABORE to the Ministry of Finance on the proposals related to the budget proposal for 2023, register number: VN/457/2022.
- 76 Does not include a preliminary estimate of the consequences of raising the tax credit for work income for those over 60 years of age in the employment package for those over 55 years of age. The estimate was revised, and the revised estimate has been taken into account in the case of the decisions taken in the 2021 budget session. As regards the reform of pay subsidies, the estimate of the number of new employed people was revised, and the revised estimate has been taken into account in the case of the decisions taken in the 2021 spending limits discussion.

- 77 The impacts by measure are presented in previous fiscal policy monitoring reports.
- 78 For example, as regards the reform of continuous learning, the Government's proposal (76/2021 vp) does not provide an estimate of the number of new employed people. However, the employment impact of the measure is described elsewhere in the text to be 10,000, although this is a scenario. In some parts of the text, e.g. in the memorandum of the Ministry of Social Affairs and Health on disability pensions and the prevention of sickness absences, it is explicitly stated that the purpose of the calculation is to outline the potential of the measure.
- 79 All government proposals related to employment measures have not yet been submitted to Parliament.
- 80 It is good that the government proposals have specifically highlighted the impact estimates of the measures rather than the potential or scenarios.
- 81 <https://tem.fi/en/government-s-employment-measures>
- 82 See also the previous fiscal policy monitoring reports, Seuri (2020), and the MoF's sustainability gap calculation.
- 83 The package also included the reform of the condition of previous employment set for unemployment security. The Government decided on 17 November 2022 that it would not submit a proposal concerning the reform to Parliament. According to the report of the Working Group on the Development of Unemployment Security, the estimated impact of the measure is 1,500 new employed people, and the net impact on public finances is EUR 54 million.
- 84 The figure was originally EUR 110 million. The data is from the General Government Fiscal Plan, Publications of the Ministry of Finance 2022:27. EUR 54 million has been deducted from the EUR 110 million because a proposal concerning the reform of the condition of previous employment set for unemployment security was not submitted to Parliament.
- 85 The impact estimate of the number of new employed people in government proposal 176/2022 concerns the obligation to seek employment in self-directed training. The impacts of the reform on employment and public finances through part-time studies could not be estimated in the government proposal.
- 86 HE 225/2021 vp
- 87 See also the previous fiscal policy monitoring reports, Seuri (2020), and the MoF's sustainability gap calculation.
- 88 Under the regulation on depreciations issued by the State Treasury, the depreciation period of IT systems is 3–17 years (intangible rights) or 3–20 years (other long-term expenditure). According to the fixed assets accounting of Palkeet, the Finnish Government Shared Services Centre for Finance and HR, the depreciation periods of (purchased) self-manufactured systems are (3–15) 5–15 years. Based on the characteristics and use of the information system described in Government proposal HE 225/2021 vp, the depreciation period has been assumed to be 10 years.
- 89 (See the opinion submitted by the Labour Institute for Economic Research LABORE to the Ministry of Finance on the proposals related to the budget proposal for 2023, register number: VN/457/2022.
- 90 The measure is part of the package for people over the age of 55, and it was preliminarily assessed to have an impact of 500 new employed people. The estimate was revised in autumn 2021 to 150–650 new employed people. The estimate was revised again as the details of the measure were specified and is now 1,000 new employed people. The up-to-date estimate has been taken into account in this calculation. The measure is not listed separately on the website of the Ministry of Economic Affairs and Employment.
- 91 In government proposal HE 153/2022, the static impact of the measure is estimated at EUR –76 million.
- 92 The lower limit of the impact is based on the MoF's static estimate. The dynamic impact of the measure on public finances is not presented in the Government proposal. At best, the net impact could be close to zero. (See the opinion submitted by the Labour Institute for Economic Research LABORE to the Ministry of Finance on the proposals related to the budget proposal for 2023, register number: VN/457/2022.
- 93 Planned to be a temporary measure and turned into a permanent measure in the February 2022 decision package. The estimate of new employed people was revised, and the revised estimate has been taken into account in the decisions taken in February 2022.
- 94 Ministry of Finance 2021: 2021 mid-term review. Employment measures and general government finances.
- 95 See <https://tem.fi/osaavan-tyovoiman-tarjonta-ja-kohtaanto> (in Finnish only).
- 96 The pay subsidy reform is laid down in government proposal HE 175/2022. It includes, for example, the measure related to pay subsidy for people aged over 55. According to the government proposal, the impacts of the reform are estimated to be 500–1,000 new employed persons in the long term. The work ability programme consists of 22 projects to be implemented in 2019–2023. There are no impact estimates of the different projects.

- 97 The speeding up of the processing of residence permits is laid down in government proposal HE 114/2022, where the impact estimate is stated to be 1,400 new employed people. The immigration-related measure can be considered to also cover other government proposals, such as HE 232/2021, which deals with the immigration of students and researchers. HE 232/2021 does not include an estimate of employment impacts. In addition, the measure related to work-based immigration involves various projects, such as the Talent Boost programme and the related sub-projects, country branding and attracting experts, and the working life diversity programme. There are no impact estimates of these. It should also be noted that it may be impossible to estimate the employment impacts of these projects.
- 98 The reasoning in HE 76/2021 on the impact of the reform of continuous learning on employment is largely in line with the memorandum of the Ministry of Education and Culture for the 2021 government discussion on spending limits, from which the scenario figure in column B is taken. However, the scenario figure is not mentioned in the government proposal.
- 99 The measure covers different projects of which there are no impact estimates.
- 100 According to the Government proposal, the target group of the measure includes 2,000 people. There is no quantitative estimate of the employment impacts.
- 101 The pay subsidy for people aged over 55 is included twice in the list maintained by the Ministry of Economic Affairs and Employment: as part of the package for people aged over 55 and as part of the pay subsidy reform. However, this has no substantial effect on the results.
- 102 The total impact of the employment package for people aged over 55 was estimated in December 2020 to be 10,300 new employed people. The package originally included the following measures: removal of additional days (employment impact 8,900), readjustment security (400), the proposals of the rehabilitation committee (100), increase in the tax credit for work income for people aged over 60 (the original impact estimate was 500), and change in the pay subsidy for people aged over 55 (the original estimate was 400). The estimate of the impacts of the increase in the tax credit for work income for people aged over 60 has been revised (1,000, HE 153/2022), and the revised estimate has been taken into account in the case of the 2021 budget session. The change in the pay subsidy for people aged over 55 is part of the pay subsidy reform, which has been taken into account in the decisions of the 2021 government discussion on spending limits (HE 175/2022). The impact of the remaining measures thus remains at 9,400 new employed people.
- 103 In government proposal HE 62/2022, the estimated impact of the removal of additional days is 8,900 and that of the readjustment security is 400. The proposals of the rehabilitation committee are included in government proposal HE 152/2021, which does not present an impact estimate.
- 104 HE 173/2020 refers to the background report of the Economic Policy Council (Seuri et al. 2018), on which the MoF's calculations are also based.
- 105 The estimate was revised later, and the revised estimate has been taken into account as part of the decisions taken in the government discussion on spending limits 2021.
- 106 <https://tem.fi/en/government-s-employment-measures>
- 107 See HE 228/2022. The impact of the measure has been calculated until 2026.
- 108 The estimate of the number of new employed people does not include the impact of the increase in the level of guarantee and national pension on retirement. According to Gruber et al. 2019, for example, the pension level affects retirement, i.e. attrition of workforce.
- 109 Gädtnäs, N. 2022: Unpublished calculation produced for this report.



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