MINISTRY
OF FINANCE

Economic Survey
Autumn 2021

Economic Prospects

Publications of the Ministry of Finance – 2021:53

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Economic Survey

Autumn 2021

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Abstract

Finland's gross domestic product is expected to grow by 3.3% in 2021. The recovery from the COVID-19 pandemic has progressed rapidly since spring this year. The economic recovery will continue in the autumn, especially in the sectors that are still subject to restrictions. As a result, economic growth will remain strong during the second half of the year and will continue in 2022. Finland's GDP is expected to grow by 2.9% in 2022 and by 1.4% in 2023.

In the forecast, the deterioration of the pandemic is not expected to slow down the economic recovery, even if the opening of society was slower than assumed in the summer forecast. Uncertainties arising from the manner in which the disease develops, virus mutations and vaccination coverage add to the uncertainty of the forecast.

Growth in employment has significantly accelerated in the first half of the year. The demand for labour is sustained by economic growth and in the short term, it can be met by the large number of unemployed persons and the government measures to increase the supply of labour. Economic recovery will boost the number of employed persons in 2022 and 2023, especially in the service sectors.

General government deficit will shrink substantially this year and in 2022 as the economic recovery and rapid rise in employment boost the tax revenue and reduce unemployment expenditure. The elimination of the need for spending and support arising from the COVID-19 epidemic will also strengthen general government finances. A temporary economic recovery will not, however, eliminate the structural imbalance affecting Finland's public finances.

Keywords economic prospects, public finance, economic development, draft budget

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Taloudellinen katsaus, syksy 2021

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Julkaisija	Valtiovarainministeriö		
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Kieli	Englanti	**Sivumäärä**	112

Tiivistelmä

Bruttokansantuotteen arvioidaan kasvavan 3,3 % v. 2021. Talouden toipuminen covid-19-epidemiasta on ollut nopeaa kuluvan vuoden keväästä alkaen. Talouden elpyminen jatkuu syksyllä varsinkin niillä toimialoilla, joita rajoitukset vielä tällä hetkellä koskevat. Sen seurauksena talouskasvu pysyy edelleen vahvana loppuvuonna ja jatkuu v. 2022. BKT:n arvioidaan kasvavan 2,9 % v. 2022 ja 1,4 % v. 2023.

Ennusteessa tautitilanteen heikentymisen ei oleteta rajoittavan talouden toipumista, vaikka yhteiskunnan avaaminen tapahtuisi hitaammin kuin kesän ennusteessa oletettiin. Taudinkehitykseen, virusmuunnoksiin sekä rokotekattavuuteen liittyvä epävarmuus lisää ennusteen epävarmuutta.

Työllisyyden kasvu on vuoden ensimmäisellä puoliskolla nopeutunut merkittävästi. Talouskasvu pitää yllä työvoiman kysyntää, jota riittää täyttämään lyhyellä aikavälillä korkealla oleva työttömyys ja hallituksen toimet työn tarjonnan lisäämiseksi. Talouden elpyminen lisää työllisten määrää vuosina 2022 ja 2023, varsinkin palvelutoimialoilla.

Julkisen talouden alijäämä pienenee tänä ja ensi vuonna voimakkaasti, kun talouden toipuminen ja nopea työllisyyskasvu lisäävät verotuloja ja pienentävät työttömyysmenoja. Myös covid-19-epidemiaan liittyvän rahankäytön ja tukitarpeen väistyminen vahvistavat julkista taloutta. Talouden väliaikainen elpyminen ei kuitenkaan poista rakenteellista julkisen talouden epätasapainoa.

Asiasanat talousnäkymät, julkinen talous, taloudellinen kehitys, budjettiesitys

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Referat

Bruttonationalprodukten beräknas öka med 3,3 procent under 2021. Ekonomins återhämtning efter covid-19-pandemin har varit snabb sedan våren i år. Återhämtningen fortsätter under hösten, särskilt inom de branscher som för närvarande berörs av restriktionerna. Till följd av detta är den ekonomiska tillväxten fortsatt stark i slutet av året och fortsätter 2022. BNP beräknas öka med 2,9 procent 2022 och med 1,4 procent 2023.

I prognosen antas en försämrad sjukdomssituation inte begränsa ekonomins återhämtning, även om öppnandet av samhället sker långsammare än antagandet i sommarens prognos. Osäkerheten kring sjukdomsutvecklingen, virusvarianterna och vaccinationstäckningen ökar osäkerheten i prognosen.

Sysselsättningen har ökat i betydligt snabbare takt under årets första hälft. Den ekonomiska tillväxten upprätthåller efterfrågan på arbetskraft, som på kort sikt kan fyllas tack vare den höga arbetslösheten och regeringens åtgärder för att öka utbudet på arbete. Ekonomins återhämtning ökar antalet sysselsatta under 2022 och 2023, i synnerhet inom servicebranscherna.

Underskottet i de offentliga finanserna minskar kraftigt i år och nästa år, då den ekonomiska återhämtningen och den snabba sysselsättningsökningen ökar skatteinkomsterna och minskar arbetslöshetsutgifterna. Den offentliga ekonomin stärks också av att utgifterna och stödbehovet i anslutning till covid-19-epidemin minskar. Den temporära ekonomiska återhämtningen eliminerar ändå inte den strukturella obalansen i den offentliga ekonomin.

Nyckelord ekonomiska utskiter, offentlig ekonomi, ekonomisk utveckling, budgetförslag

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The source for all data on materialised developments is Statistics Finland unless otherwise indicated.

SYMBOLS AND CONVENTIONS USED

-	nil
0	less than half the final digit shown
..	not available
.	not pertinent
**	forecast
CPB	CPB Netherlands Bureau for Economic Policy Analysis
HWWI	Hamburgisches WeltWirtschafts Institut
IMF	International Monetary Fund
MEAE	Ministry of Economic Affairs and Employment
MoF	Ministry of Finance
MSAH	Ministry of Social Affairs and Health

Each of the figures presented in the tables has been rounded separately.

ECONOMIC SURVEY AUTUMN 2021

This Economic Survey offers projections of economic developments in 2021–2023. In addition to short-term prospects, it includes a medium-term economic outlook extending to 2025.

The forecast and trend projections in the survey are prepared independently by the Ministry of Finance Economics Department based on the Act on the implementation of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union and on multi-annual budgetary frameworks (869/2012).

The forecasts are based on national accounts data for the year 2020 published by Statistics Finland in July 2021, on other public statistical sources available by 30 August 2021 and the decisions taken by the Government in its budget negotiations on 9 September 2021.

Helsinki September 2021

Ministry of Finance Economics Department

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Preface

The view that the Finnish economy will recover rapidly from the blow dealt by COVID-19 during the second half of 2021 and the first half of 2022 has gained strength during the summer. However, according to the estimates of the Ministry of Finance, the upturn will be short-lived.

The ministry estimates that the Finnish GDP will grow at a rate of about 3% in 2021 and 2022. After the economic cycle has stabilised, growth will slow down and it will be determined by economic performance – growth in employment and productivity and the competitiveness of the economy. After the short period of growth, GDP growth is in danger of slowing down to between 1% and 1.5%. Finland is ageing and in the current situation it cannot do any better.

The short period of rapid economic growth and a sharp decline in spending directly related to the COVID-19 epidemic will reduce general government deficit in 2021 and 2022 but will not make the situation better in the long term. To stop further increase in general government indebtedness so that public finances would be on a steady and sustainable basis in the long term would require more extensive and effective use of national resources: a higher employment rate, more rapid economic growth and more cost-effective public administration.

The short period of economic growth is connected with the release of pent-up demand in a situation where vaccination is progressing rapidly, restrictions on business activities are eased and both households and companies are optimistic about the future. The upturn is part of the natural cycle of an economic blow and recovery from it, which has been supported by an active economic policy both in Finland and globally.

The natural cycle will help the economy to recover rapidly. In this situation, the economy should no longer be supported with public sector measures. Instead, private investments and supply of labour should now be encouraged so that output growth would not wane because of the lack of actors and production capacity, rising costs and erosion of competitiveness.

Parallel to the brief economic upturn, Finland and the rest of the world are experiencing a structural change. It is connected with the new ways of consumption and work tested during the COVID-19 pandemic. In Finland, ageing of the population and shrinking of the working-age population have been part of this transition for years. Global introduction of new technologies and changes in production structures that stem from the changing consumer choices and business investments prompted by climate change adaptation and mitigation are new powerful factors promoting the transition.

Structural change always opens up new opportunities, and pioneers will be the first ones to benefit from the opportunities.

To enable change, it is important that amid the change, Finland has as an adequate supply of working-age and skilled workforce that is available for the labour market and that the labour force is directed to areas where it can be used in the most productive manner.

In this respect, the situation is not good. Labour force and employment are now growing at a rapid rate but at the same time, long-term unemployment remains high, there are plenty of vacancies and the shortage of skilled labour has again been highlighted as a factor limiting output growth. Labour force is not fully used and correcting the situation is one of the key issues facing the Finnish economy.

Climate change, changes in production structures and the introduction of new technologies require substantial investments in global scale. To boost its economic performance and ensure faster than expected growth in the next few years, Finland should be able to use the new opportunities and attract a large part of the new investments.

The key issue is to ensure a favourable and internationally competitive investment environment. It is determined by a large number of factors connected to economic and social structures and mobility of production factors. They include the functioning of labour and housing markets, information and transport infrastructure and smooth immigration. The investment environment is also impacted by competitive taxation, business subsidies and regulation, smooth permit processes, and adequate and flexible funding channels for enterprises. Attracting foreign companies to Finland and encouraging them to invest in Finnish enterprises as well as the ability of Finnish companies to expand internationally are also key factors. Entrepreneurship, good management and opportunities for fair competition in the markets on equal terms can be added to the list.

The list is long. We do not need to be the number one in the world in all things but we must be good enough in all areas. How to generate value added and to how to boost value added in an ecologically sustainable manner by economic policy means are core issues in this respect. Only by successfully addressing these issues can we ensure the wellbeing of coming generations and the future of Finnish welfare society and its funding base.

Summary

Economic outlook for the period 2021 – 2023

Finland's gross domestic product is expected to grow by 3.3% in 2021. The recovery from the COVID-19 pandemic has progressed rapidly since spring this year. In particular, the employment rate has improved rapidly. The economic recovery will continue in the autumn, especially in the sectors that are still subject to restrictions. As a result, economic growth will remain strong during the second half of the year and will continue in 2022. The GDP is expected to grow by 2.9% in 2022 and by 1.4% in 2023.

In the forecast, the deterioration of the pandemic is not expected to slow down the economic recovery, even if the opening of society was slower than expected in the summer forecast. Uncertainties arising from the manner in which the disease develops, virus mutations and vaccination coverage add to the uncertainty of the forecast.

General government deficit will shrink substantially this year and in 2022 as the economic recovery and rapid rise in employment boost the tax revenue and reduce unemployment expenditure. The elimination of the need for spending and support arising from the COVID-19 epidemic will also strengthen general government finances. A temporary economic recovery will not, however, eliminate the structural imbalance affecting Finland's public finances.

Global economy will continue on a rapid growth path

Helped by fiscal stimulus, release of pent-up consumption demand and progress in vaccinations, the global economy has recovered rapidly in the shadow of the COVID-19 pandemic. The economic indicators in developed countries for the coming months have decreased somewhat, but are still on a high level. The world economy will grow by 6.1% in 2021 and by 4.7% in 2022.

The rapid growth in the euro area that began in the second quarter will continue as restrictions are eased and the demand for services is increasing. The growth is also boosted by the recovery instrument of the EU (NGEU). Strong stimulus measures introduced in the United States have led to a rapid increase in private consumption, which, together with supply constraints, has accelerated consumer price inflation. Consumers' view of the current situation is very positive, but their expectations of the future are much more pessimistic.

Consumption growth is the key issue in the outlook for the Chinese economy. Growth in consumption accounted for more than 60% of the economic growth during the first half of 2021. Investments and net exports made a smaller contribution to economic growth even though foreign trade increased rapidly in the summer. Consumption will increase sharply as the pandemic subsides.

World goods trade has recovered quickly, largely due to the low base of comparison last year, but trade is hampered by a shortage of industrial components, problems with container transport logistics and the partial closure of a large Chinese port in August. The trade will grow by 8.3% in 2021 and will return to its long-term growth path this year. In 2022, growth will slow down to five per cent.

Investments will grow throughout the outlook period

GDP growth will accelerate to 3.3% in 2021. Economic recovery during the spring was than expected. Economic growth will continue at an above-average rate during the second half of the year even though the operating environment has not yet recovered from the consequences of the COVID-19 pandemic. A high savings rate and optimism among consumers will create a basis for a rapid growth in private consumption. Private investments already increased during the first half of 2021 and the trend in housing construction in particular has been positive. The rapid growth in world trade, which started at the end of 2020, continued during the first half of 2021. Global economic recovery, stimulus measures and the demand for Finnish exports in important trade areas will boost both exports and imports.

Growth in employment has significantly accelerated in the first half of the year. In June, the number of employed persons was 2.1% (more than 50,000) higher than at the end of last year. According to Statistics Finland, unemployment was 12.4%

higher during the first half of 2021 than in the same period last year. However, there was no longer any growth in the unemployment trend in summer and steady growth in employment will also gradually reduce the number of unemployed.

There is a strong demand for labour, and in a number of sectors, the potential is even higher. In fact, there are plenty of job opportunities on offer, as employers have made a record number of vacancies available through labour administration. The more extensive survey-based statistics on job vacancies compiled by Statistics Finland also shows that the number of job vacancies is now high.

Driven by wage drifts and negotiated pay rises, nominal earnings will increase by 2.3% in 2021. Measured on the basis of the consumer price index, an inflation rate of 1.8% is forecast for 2021. Inflation has accelerated as a result of rises in energy prices.

Finland's gross domestic product is expected to grow by 2.9% in 2022. Supported by exports, the growth will continue as the strong recovery of the developed world (especially the euro area) is continuing. In sectors that were particularly hard hit by the crisis, such as tourism, recovery will be further delayed in 2021 as the COVID-19 pandemic is discouraging travel. In 2022, rapid growth in foreign trade in services is expected as the easing of restrictions and uncertainty will boost growth in crisis sectors. Finland's exports will reach pre-crisis levels in early 2022. Exports of goods will recover faster than exports of services and will reach pre-crisis levels already in 2021.

Private investments will grow at an average rate of 3.5% during the outlook period, which means that their ratio to GDP will reach nearly 20% in 2023. A strong recovery in machinery and equipment investments is expected as the outlook for the global economy improves. The investment outlook for Finnish industries is good. Funding from the Recovery and Resilience Facility of the EU (RRF) will boost private investments between 2021 and 2023.

Housing investments will decline slightly in 2022 but housing starts will nevertheless remain at a relatively high level. Towards 2023, housing starts will gradually approach the long-term average and housing investments will fall in 2023. Low interest rates will keep up the demand for housing loans and housing construction.

Private consumption will grow more rapidly in 2022 and the consumption will exceed the pre-COVID-19 levels. A rapid decline in the savings rate is expected in the next few years as most of the savings will be released for consumption. The savings rate will, however, remain positive throughout the outlook period as consumption will remain lower than disposable income.

Driven by growth in domestic consumption and investments, imports will continue to grow, with the period of fastest growth expected in 2021 and 2022. Imports will also be sustained by an increase in output volumes and strong export growth.

In 2023, GDP growth will slow down to 1.4%, which is still above the medium-term average. The short period of strong growth driven by global stimulus and the recovery from the COVID-19 pandemic will be over and the economy is again facing the growth constraints identified before the crisis.

The demand for labour is sustained by economic growth and in the short term, it can be met by the large number of unemployed persons and the government measures to increase the supply of labour. Economic recovery will boost the number of employed persons in 2022 and 2023, especially in the service sectors. The number of employed persons is expected to increase by 1.5% in 2022. As the economy loses strength, the growth will slow down in 2023 but the employment rate will exceed 74% in 2023.

Driven by rising earnings and higher employment, the wage bill is expected to increase by an annual rate of nearly four per cent in 2022 and 2023. At the same time, measured with the national consumer price index, inflation is expected to accelerate to between 1.6% and 1.7%. Rise in wages will be gradually passed on to prices of services.

Economic recovery will not eliminate the imbalance in the public finances

General government deficit will shrink substantially in 2021 and in 2022 as strong economic growth and rapid rise in employment boost the tax revenue and reduce unemployment expenditure. A sharp reduction in the spending and need for support related to the COVID-19 epidemic will also strengthen general government finances.

A brief economic recovery will not, however, eliminate the structural imbalance affecting Finland's public finances. As the economic cycle stabilises, the consolidation strengthening of the general government budgetary position will slow down and Finland's public finances will remain in deficit by more than EUR 3 billion as we approach the mid-2020s.

Central government will remain the general government sector with the highest deficit throughout the outlook period. The local government budgetary position will also remain in deficit after exceptionally strong performance last year. The wellbeing services counties, which will be established as part of the health and social services reform, will also start in 2023 with a slight deficit due to large investment projects. At the same time, social security funds will remain in surplus throughout the outlook period.

The public debt-to-GDP ratio increased by 10 percentage points in 2020 to nearly 70%. During the outlook period, the indebtedness rate will decelerate considerably, and in the mid-2020s, the debt ratio is expected to temporarily stabilise at just over 73%, supported by exceptionally low interest rates. However, the increase in age-related expenditure threatens to again put the debt-to-GDP ratio on a growth path, which will be accelerated by the normalisation of interest rates. In the long term, there is an imbalance between Finland's public expenditure and revenue and this sustainability gap amounts to over 2.5% of GDP.

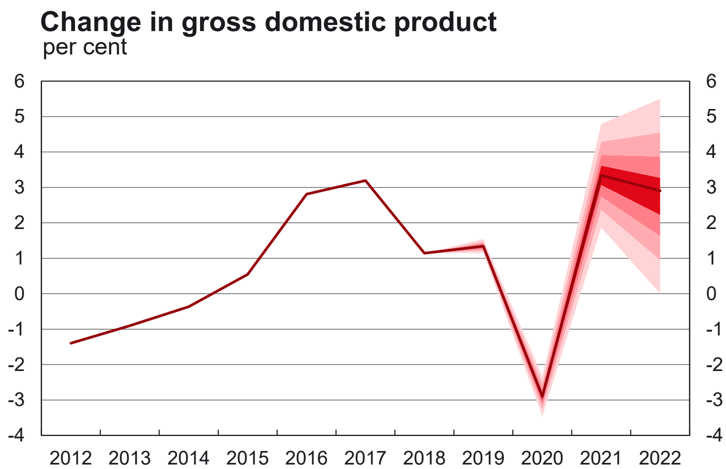
Risks are in balance

The main risks in the forecast are still related to the COVID-19 pandemic and the restrictions introduced to manage it. The nature of the pandemic has changed since early summer and the situation may rapidly change for the worse despite the progress in vaccinations. The clinical picture and the spread of the disease are also changed by virus mutations. There is a risk that by failing to contain the pandemic, emerging countries will face a period of slow growth, and this would be a significant blow to global economic growth.

By slowing down the recovery, a prolonged pandemic would have a strong impact on private consumption and, in particular, on the demand for services. Deterioration of the COVID-19 situation is also reflected in growing uncertainty in the investment environment, which may postpone investments or prevent them altogether.

A situation in which the Recovery and Resilience Facility would encourage more private investments than forecast can be seen as a positive risk for such investments.

The uncertainty of the economic forecast can be illustrated with the confidence intervals based on previous forecasting errors and built around the forecast. According to them, there is an 80% probability that GDP growth will be between 2% and 5% in 2021. There is also an 80% probability that GDP growth will be between 0% and 6 % in 2022. The economic growth rate may also fall outside the confidence interval, especially because the growth estimates are associated with an exceptionally high degree of uncertainty.



Sources: Statistics Finland, MoF

Table 1. Key forecast figures

	2020	2018	2019	2020	2021**	2022**	2023**
	EUR bn	change in volume, %					
GDP at market prices	236	1.1	1.3	-2.9	3.3	2.9	1.4
Imports	85	5.7	2.3	-6.4	5.2	5.1	3.2
Total supply	**321**	**2.4**	**1.6**	**-3.9**	**3.8**	**3.5**	**1.9**
Exports	86	1.5	6.8	-6.7	5.6	5.8	3.4
Consumption	178	1.8	1.1	-2.9	3.3	2.6	0.9
private	121	1.7	0.7	-4.7	3.2	3.8	2.0
public	58	2.0	2.0	0.5	3.6	-0.0	-1.4
Investment	57	3.6	-1.6	-0.7	2.8	2.8	2.6
private	45	3.1	-2.4	-3.4	2.9	3.7	4.0
public	12	5.9	2.4	11.0	2.6	-0.6	-3.1
Total demand	**321**	**2.4**	**1.7**	**-3.8**	**3.8**	**3.5**	**1.9**
domestic demand	236	2.7	-0.4	-2.5	3.1	2.6	1.3

Table 2. Other key forecast figures

	2018	2019	2020	2021**	2022**	2023**
GDP, EUR bn	233	240	236	249	261	269
Services, change in volume, %	2.0	1.7	-3.6	3.5	2.7	1.2
Industry, change in volume, %	-3.6	2.6	-0.4	4.4	3.3	2.3
Labour productivity, change, %	-1.6	0.3	-0.0	1.0	1.4	0.9
Employed labour force, change, %	2.8	1.0	-1.5	2.2	1.5	0.6
Employment rate, %	70.7	71.6	70.7	72.4	73.6	74.1
Unemployment rate, %	7.4	6.7	7.7	7.8	6.8	6.4
Consumer price index, change, %	1.1	1.0	0.3	1.8	1.6	1.7
Index of wage and salary earnings, change, %	1.7	2.1	1.9	2.3	3.0	2.5
Current account, EUR bn	-4.3	-0.7	1.8	-0.9	-0.4	-0.2
Current account, relative to GDP, %	-1.8	-0.3	0.8	-0.4	-0.2	-0.1
Short-term interest rates (3-month Euribor), %	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4
Long-term interest rates (10-year govt. bonds), %	0.7	0.1	-0.2	-0.1	-0.1	0.0
General government expenditure, relative to GDP, %	53.3	53.2	57.3	56.8	54.3	53.4
Tax ratio, relative to GDP, %	42.4	42.2	42.1	43.2	42.1	42.0
General government net lending, relative to GDP, %	-0.9	-0.9	-5.4	-3.9	-2.4	-1.5
Central government net lending, relative to GDP, %	-1.3	-1.1	-5.5	-4.2	-2.8	-1.7
General government gross debt, relative to GDP, %	59.8	59.5	69.5	71.2	71.3	72.2
Central government debt, relative to GDP, %	45.0	44.3	52.9	55.1	55.3	55.9

Medium-term outlook for the period 2024-2025

The Finnish economy will grow rapidly in 2021 and 2022 and as a result, economic output will approach the estimated potential output and the output gap will be almost closed in 2023. In its medium-term projection, the Ministry of Finance expects the output gap to remain closed after the current economic cycle, in other words, the Finnish economy will grow at its potential rate in 2024 and 2025.[1] Thus, annual economic growth is expected to slow down to about 1%.[2]

The change in labour input will only have a minor impact on potential output in the period 2021–2025. Before the middle of the decade, labour input will start declining as the working-age population shrinks and there is no longer any growth in the participation rate. The achievement of the structural unemployment rate will also slow down growth in labour input.

In addition to labour input, the production conditions of the economy are also influenced by the capital stock. Last year, as a result of the downturn and uncertain economic outlook, the investment rate fell, which temporarily slowed down potential output growth. Growth in capital stock will boost potential output growth by about 0.5% each year between 2021 and 2025.

Total factor productivity is the third source of potential output growth. It has grown more rapidly in recent years, compared to the early 2010s. However, productivity growth remains weak compared to the early 2000s. Structural changes in the Finnish economy are one factor explaining the weak growth. The output of high-productivity sectors has declined and services have become more predominant in the overall structure of the economy. Annual total factor productivity is expected to grow by just over 0.5% in the period 2021–2025, which can be compared with an average annual growth of more than 2% in the early years of the 2000s.

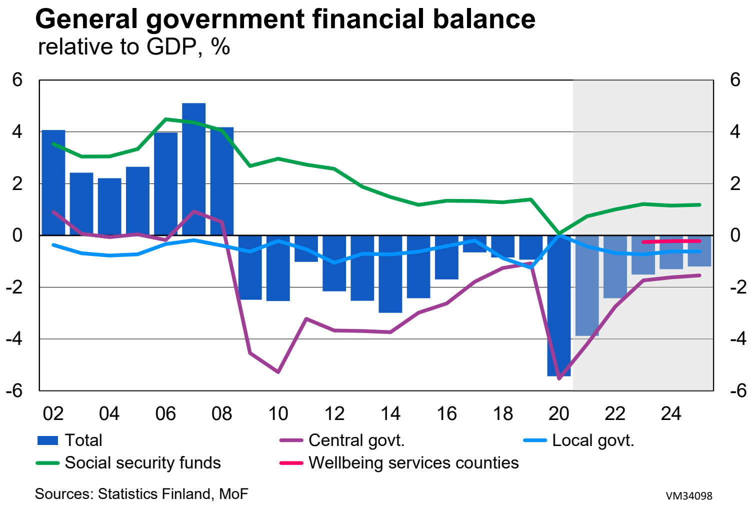
1 The Ministry of Finance bases its medium-term projection on an estimate of potential output growth, which is considered to determine the medium-term and long-term growth potential of the economy. In this projection, economic growth for the years t+3 and t+4 is estimated so that the output gap will close by the year t+4. However, during exceptional economic cycles, deviations from this basic assumption can be made if no credible results can be produced by adhering to the rule. In that case, depending on the situation, the output gap might be positive or negative in the year t+4.

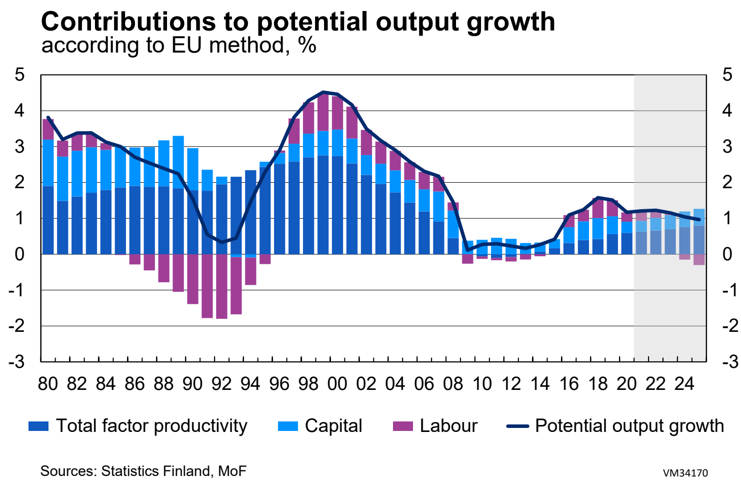
2 In its assessments of potential output and the output gap, the Ministry of Finance uses the production function method jointly developed by the European Commission and EU Member States, in which potential output growth is divided into projections of potential labour input, capital and total factor productivity. Potential output and output gap are latent variables, the assessment of which involves uncertainties, especially during a strong economic cycle and under conditions of rapid changes in the production structure.

Table 3. Key forecast figures for the medium term

	2019	2020	2021**	2022**	2023**	2024**	2025**
GDP at market prices, change in volume, %	1.3	-2.9	3.3	2.9	1.4	1.1	1.0
GDP, EUR bn	240	236	249	261	269	278	286
Consumer price index, change, %	1.0	0.3	1.8	1.6	1.7	1.8	1.9
Unemployment rate, %	6.7	7.7	7.8	6.8	6.4	6.3	6.2
Employment rate, %	71.6	70.7	72.4	73.6	74.1	74.3	74.5
General government net lending, relative to GDP, %	-0.9	-5.4	-3.9	-2.4	-1.5	-1.3	-1.2
Central government	-1.1	-5.5	-4.2	-2.8	-1.7	-1.6	-1.5
Local government	-1.2	0.0	-0.4	-0.7	-0.7	-0.6	-0.6
Wellbeing services counties					-0.3	-0.2	-0.2
Social security funds	1.4	0.1	0.7	1.0	1.2	1.2	1.2
Structural balance, relative to GDP, %	-1.2	-3.2	-2.8	-2.3	-1.5	-1.3	-1.2
General government gross debt, relative to GDP, %	59.5	69.5	71.2	71.3	72.2	72.9	73.4
Central government debt, relative to GDP, %	44.3	52.9	55.1	55.3	55.9	56.3	56.5
Output gap, % of potential output[1]	0.3	-3.8	-1.8	-0.3	-0.1	-0.0	0.0

[1] Estimated according the method developed jointly by the EU Commission and Member States


General government financial balance
relative to GDP, %
6
4
2
0
-2
-4
-6
02 04 06 08 10 12 14 16 18 20 22 24
Total
Central govt.
Local govt.
Social security funds
Wellbeing services counties
Sources: Statistics Finland, MoF
VM34098


Contributions to potential output growth
according to EU method, %
5
4
3
2
1
0
-1
-2
-3
80 82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22 24
Total factor productivity
Capital
Labour
Potential output growth
Sources: Statistics Finland, MoF
VM34170

1 Economic outlook

1.1 Global economy

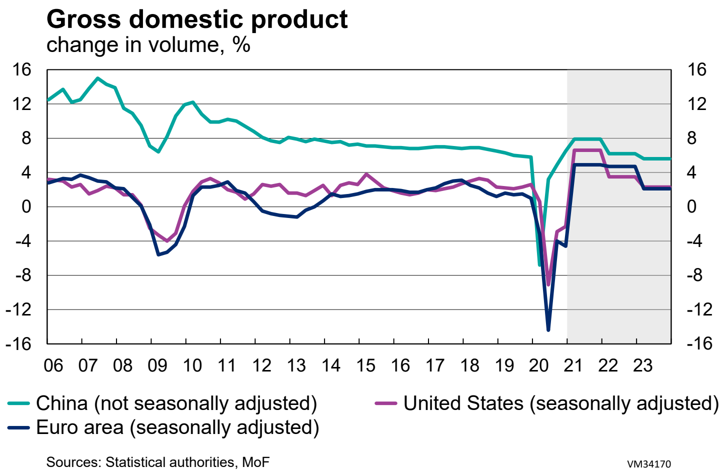
1.1.1 The fastest phase of global growth has passed

Helped by fiscal stimulus, release of pent-up consumption demand and progress in vaccinations, the global economy has recovered rapidly in the shadow of the COVID-19 pandemic, but the fastest phase of growth has passed. Short-term economic indicators have declined somewhat, but are still on a high level in developed countries. However, in emerging economies, vaccinations have not progressed at the same rate. In these countries, the outlook is more challenging than in the industrialised world, partly because of the weakening of their currencies against the dollar. The global economy will grow by 6.1% in 2021 and by 4.7% in 2022.

A very strong stimulus policy in the United States has led to a rapid increase in private consumption, which, together with supply constraints, has accelerated consumer price inflation. Consumers' view of the current situation is very positive, but their expectations of the future are much more pessimistic. The outlook for industries is overshadowed by a shortage of components. The United States economy will grow by 6.6% in 2021 and by 3.5% in 2022.

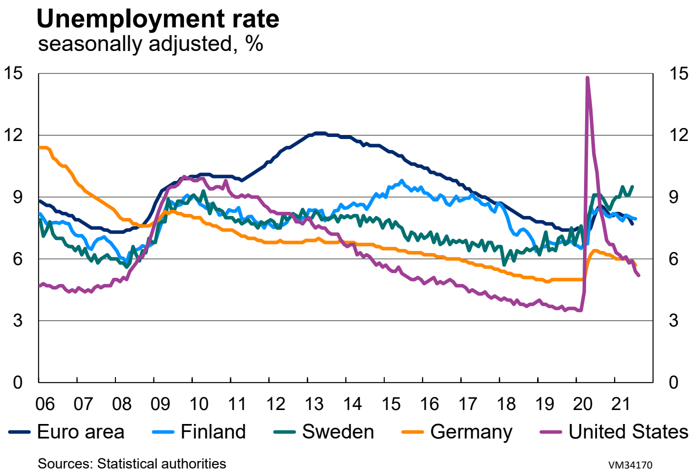
Consumption growth is the key issue for the Chinese economic outlook. According to the country's statistics office, growth in consumption accounted for more than 60% of the economic growth during the first half of 2021. Investments and net exports made a smaller contribution to economic growth even though foreign trade increased rapidly in the summer. Both consumption and foreign trade will continue to grow at a brisk rate in the coming months as the COVID-19 pandemic subsides. The Chinese economy will grow by 7.9% in 2021 and the rate of growth will slow down to 6.2% in 2022.

The rapid growth that began in the euro area in the second quarter will continue as the restrictions are eased and the demand for services is increasing. The growth will also be boosted by the recovery instrument of the EU (NGEU). The growth will peak in the second half of this year. Total output will reach 2019 levels by the end of 2021. However, the outlook for manufacturing is overshadowed by bottlenecks affecting the availability of production inputs. The economy will grow by 4.9% in 2021 and by 4.7% in 2022. In 2021, the French economy will grow at a substantially faster rate than the German economy, which is partially due the greater service-orientation of its economy. In Germany, shortage of semiconductors in the car industry is the main factor slowing down growth.



The economy of the United Kingdom has recovered rapidly despite a difficult COVID-19 situation. It seems that the large-scale lifting of restrictions in England in July has only led to a slight increase in new infections. Private consumption has made an extremely strong recovery after the COVID-19 crisis. The economy will grow by 5.3% in 2021 and the growth will continue at a rate of 4.8% in 2022.

In Sweden, the difficult COVID-19 situation has eased and the outlook for both industries and services is extremely bright. Private consumption is boosted by steady growth in employment and a strong competitive position of Swedish companies will keep investments at high level. Exports have also grown during the pandemic even though the Swedish crown has strengthened somewhat against the euro. The economy will grow by 4.7% in 2021 and by 3.1% in 2022.



Boosted by the recovery of the global economy and high crude oil prices, the Russian economy is doing reasonably well despite a difficult COVID-19 situation. However, the outlook for the country's industries remain weak. Further acceleration of inflation and modest rise in real income are two factors slowing down growth in private consumption. Russian economic growth will slow down from 3.5% in 2021 to 2.1% in 2022.

The outlook for the Japanese economy is overshadowed by a rapid weakening of the COVID-19 situation in summer. The country's government declared the fourth state of emergency in July, and in August, it was extended to cover a total of 21 prefectures. Such major economic areas as Tokyo and Osaka are now subject to restrictions. The absence of visitors was the main reason why the Summer Olympics did not give the Japanese economy the expected boost. However, the country's industries are optimistic about the future. The economy will recover from the deep downturn experienced last year and will grow at a rate of 2.7% in 2021. Growth will slow down to 1.2% in 2022.

1.1.2 There is an expectant mood in the financial markets

There has been a slight increase in stock market volatility in late summer, but stock indexes remain at historic highs. Plans of the US central bank to gradually tighten the monetary policy have dampened the market atmosphere. The euro has weakened slightly against the US dollar after the spring.

1.1.3 Consumer price inflation has accelerated, long-term interest rates are declining again

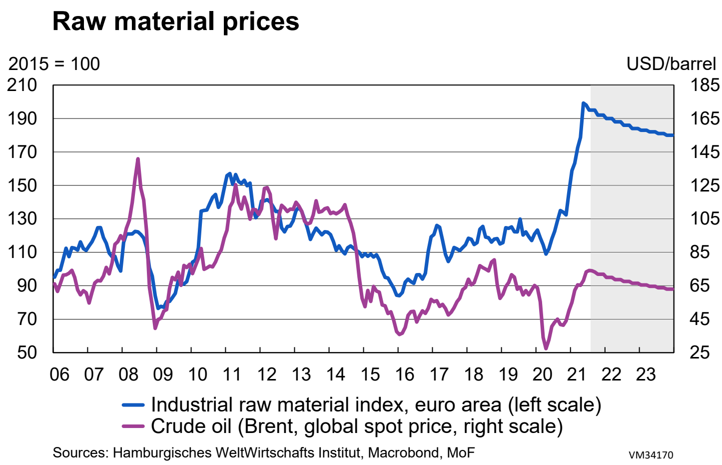
Consumer prices inflation has accelerated, especially in the United States, due to supply bottlenecks and factors supporting demand. In the euro area, acceleration of inflation has been much more moderate. However, the increase in prices is widely seen as a temporary phenomenon. The problems related to the supply of consumer goods will probably be solved and the release of savings accumulated by consumers will taper off.

The increase in long-term interest rates at the beginning of this year has now peaked as capital is flowing into bonds. There have been no significant changes in short-term interest rates. However, both short-term and long-term interest rates will rise moderately in the outlook period.

1.1.4 Raw materials have reached record highs, crude oil price is expected to decrease

The prices of industrial raw materials have been at record levels during the summer, largely reflecting the growth in manufacturing industries. Since then, prices have fallen slightly. The prices of raw materials will remain at above-average levels in the next few years.

Crude oil prices have reached relatively high levels this year, compared with the lows recorded in March 2020. However, the lifting of the production restrictions set out in the OPEC+ agreement will reduce the prices during the outlook period. Oil futures also suggest that the prices are on their way down.



1.1.5 There are bottlenecks in world trade

World goods trade has recovered quickly, largely due to the low base of comparison last year, but trade is hampered by a shortage of industrial components, problems with container transport logistics and the partial closure of a large Chinese port in August. The trade will grow by 8.3% in 2021 and is expected to return to its long-term growth path this year. In 2022, growth will slow down to five per cent.

1.1.6 Risks are slightly more skewed to the downside

A more than expected optimistic outlook for consumers and companies and faster progress in vaccinations also in developing countries would boost global economic growth and growth in world trade more than described above. Significant downside risks include a renewed COVID-19 outbreak caused by new virus mutations, a broader cost spiral in the US economy due to faster consumer price inflation, and the persistence of industrial bottlenecks.

Table 4. Gross domestic product

	2018	2019	2020	2021**	2022**	2023**
	change in volume, %					
World (PPP)	3.8	3.0	-3.2	6.1	4.7	3.4
Euro area	1.9	1.4	-6.5	4.9	4.7	2.1
EU	2.1	1.7	-6.0	4.6	4.3	2.0
Germany	1.1	1.1	-4.8	3.8	4.6	2.0
France	1.8	1.8	-8.0	5.6	4.4	2.1
Sweden	2.0	2.0	-2.9	4.7	3.1	2.4
United Kingdom	1.3	1.4	-9.8	5.3	4.8	1.5
United States	2.9	2.3	-3.5	6.6	3.5	2.3
Japan	0.6	0.0	-4.7	2.7	1.2	0.6
China	6.7	6.0	2.3	7.9	6.2	5.6
India[1]	6.6	4.1	-7.4	5.6	6.7	7.3
Russia	2.8	2.0	-3.0	3.5	2.1	1.3

[1] Fiscal year

Sources: Statistical authorities, MoF

Table 5. Background assumptions

	2018	2019	2020	2021**	2022**	2023**
World trade growth, %	3.8	-0.3	-5.5	8.3	5.0	4.3
USD/EUR	1.18	1.12	1.14	1.19	1.17	1.15
Industrial raw material price index, EA, € (2015=100)	118.5	122.1	124.7	186.7	187.0	181.5
Crude oil (Brent), $/barrel	71.6	64.1	43.4	68.9	68.2	64.3
3-month Euribor, %	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4
Government bonds (10-year), %	0.7	0.1	-0.2	-0.1	-0.1	0.0
Export market share (2010=100)[1]	93.1	99.8	98.5	96.1	96.8	96.9
Import prices, %	3.3	0.4	-5.1	4.4	2.2	1.7

[1] Ratio of export growth to world trade growth

Sources: CPB, Macrobond, HWWI, Statistics Finland, MoF

1.2 Foreign trade

1.2.1 Exports and imports

The rapid growth in world trade, which started at the end of 2020, continued during the first half of 2021. Strengthening of the global economy, stimulus measures and the growth in demand for Finnish exports in important trade areas will boost both exports and imports, especially in the early years of the outlook period. However, the shortage of components and other intermediate products is slowing down companies' ability to meet the growing demand globally. In sectors particularly hard hit by the crisis, such as tourism, recovery will be further delayed in 2021 as the COVID-19 pandemic is discouraging travel.

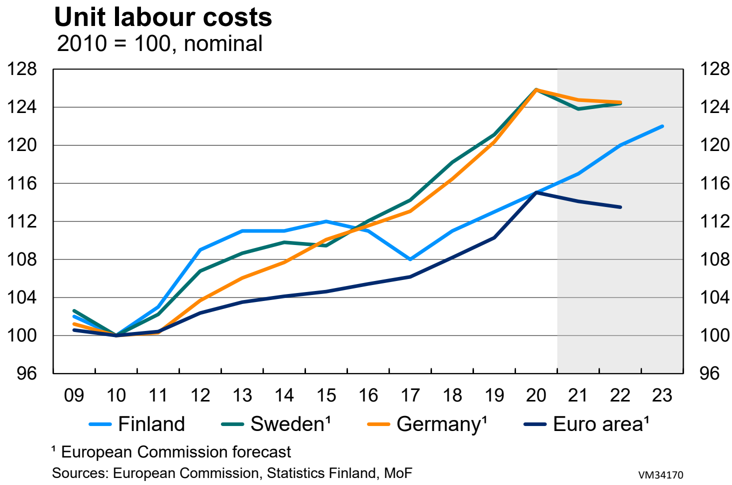
There was only a moderate fall in the volume of goods trade in 2020, while the volume of exports and imports of services decreased sharply. In 2021, both exports and imports of goods are expected to grow rapidly and the strong growth will continue into 2022. The growth in the trade in services is still slowed down by the sluggish recovery of tourism and transport, but in many other sectors the outlook is bright. Exports of ICT services, Finland's largest service export item, also grew during 2020. In 2022, rapid growth in foreign trade in services is expected as the easing of restrictions and uncertainty will boost growth in crisis sectors. In 2023, increase in foreign trade in goods and services will slow down but will continue on a growth path.

Table 6. Foreign trade

	2018	2019	2020	2021**	2022**	2023**
	change in volume, %					
Exports of goods and services	1.5	6.8	-6.7	5.6	5.8	3.4
Imports of goods and services	5.7	2.3	-6.4	5.2	5.1	3.2
	change in price, %					
Exports of goods and services	4.1	-0.3	-4.2	4.2	1.9	1.6
Imports of goods and services	3.3	0.4	-5.1	4.4	2.2	1.7

Exports contracted by 6.7% in 2020. Supported by strong export demand, export volumes are expected to increase by 5.6% in 2021. Strong export growth will continue in 2022 and a growth rate of 5.8% is expected. Finnish exports are expected to reach pre-crisis levels in early 2022. Exports of goods will recover faster than exports of services and will reach pre-crisis levels already during 2021. The rate of export growth will slow down in 2023, to 3.4%.

Volume of imports contracted by 6.4% in 2020. Domestic consumption and investments are expected to grow during the outlook period, with the fastest growth taking place in 2021 and 2022. Growth in production volumes and strong export growth will also boost imports, which will increase by 5.2% in 2021 and by 5.1% in 2022. In 2023, imports will grow by 3.2%.



1.2.2 Prices and current account

There was a sharp decrease in both export and import prices in 2020; export prices fell by 4.2% and import prices by 5.1%. A decrease in goods prices in foreign trade was the main factor behind the fall in prices. Prices of industrial raw materials and crude oil increased rapidly during the first half of 2021, which is reflected in the prices of exports and imports of goods. Export prices are expected to increase by 4.2% and import prices by 4.4% in 2021. While the prices are expected to grow more slowly in 2022, the upward trend in both export and import prices will continue towards the end of the outlook period.

According to the latest statistics, there was a surplus in Finland's current account in 2020. As the value of imports contracted more strongly than exports, foreign trade surplus increased, resulting in a current account surplus. According to current data, there was also a substantial increase in net primary income from abroad in 2020. The decision of the ECB not to extend beyond the end 2021 its recommendation that all banks limit dividends can be expected to reduce the surplus in factor incomes and income transfers. The balance of goods and services will remain in surplus in 2021 and towards the end of the outlook period. Current account will be in balance at the end of the outlook period in 2023.

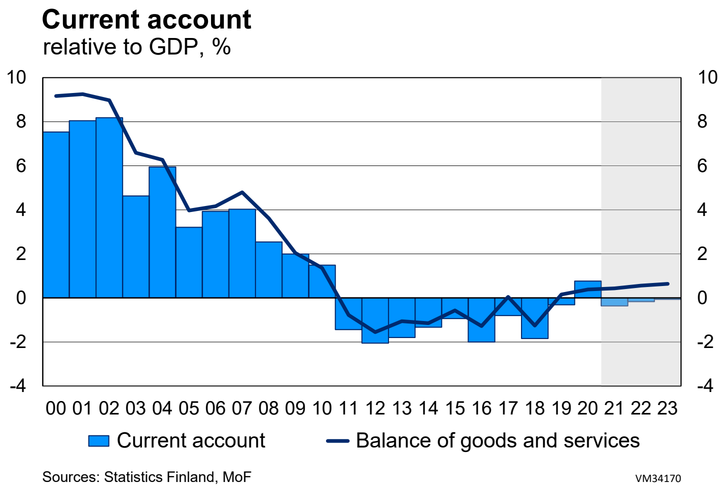


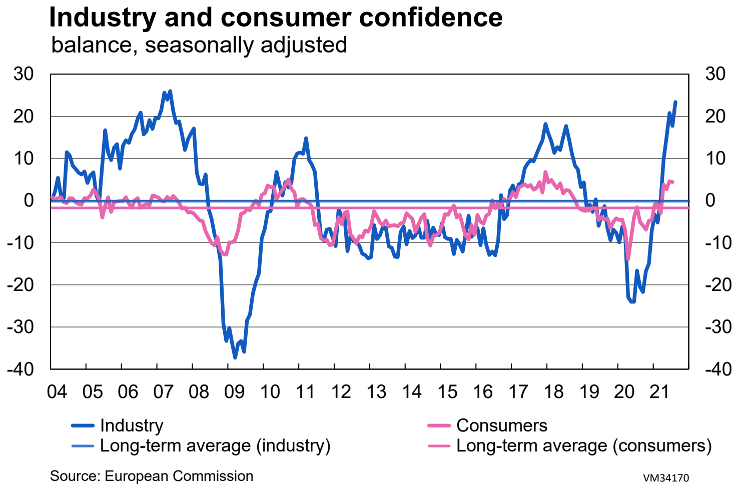
Table 7. Current account

	2018	2019	2020	2021**	2022**	2023**
	EUR bn					
Balance of goods and services	-2.9	0.4	0.9	1.1	1.5	1.7
Factor incomes and income transfers, net	-1.4	-1.1	0.9	-2.0	-1.9	-1.9
Current account	-4.3	-0.7	1.8	-0.9	-0.4	-0.2
Current account, relative to GDP, %	-1.8	-0.3	0.8	-0.4	-0.2	-0.1

1.3 Domestic demand

1.3.1 Private consumption

Private consumption contracted by 4.7% in 2020, but there was practically no decrease in household disposable income. As a result of the COVID-19 epidemic, household saving has reached extremely high levels: in the first quarter of this year, the savings rate was more than 7%.



Consumers' confidence in their own economy has remained very high throughout the summer. In particular, consumers' estimate of the current state in their own economy has strengthened substantially compared to the first half of 2021.

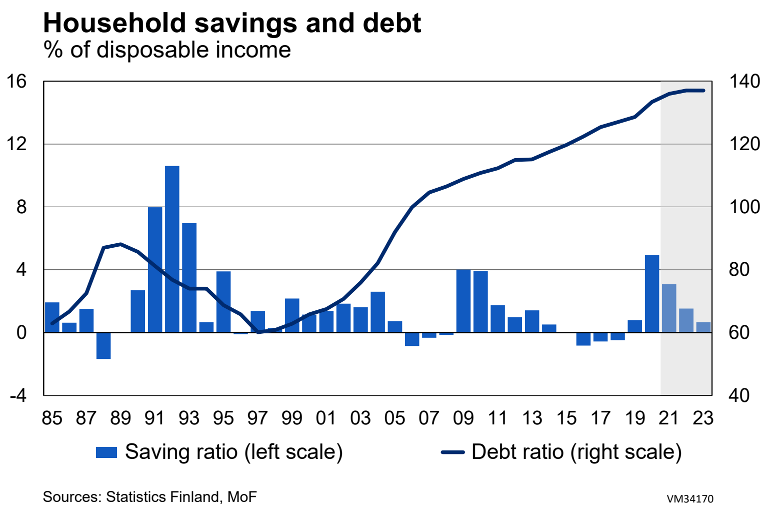
Boosted by a substantial improvement in the employment situation, the wage bill grew more rapidly in the second quarter. Retail sales have continued to grow at a brisk rate but a global component shortage is slowing down the sales of new cars.

Consumption of durables has already exceeded 2019 levels, and as a result, the growth is expected to remain steady during the outlook period. At the same time, there is pent-up demand for semi-durables, which will lead to a strong increase in consumption in 2021 and 2022.

The consumption of non-durables increased at an exceptionally high rate in 2020, as the consumption of food and electricity at home was boosted by remote work and a decrease in travel. The consumption of non-durables is expected to level off and continue at a slower rate from 2021 onwards.

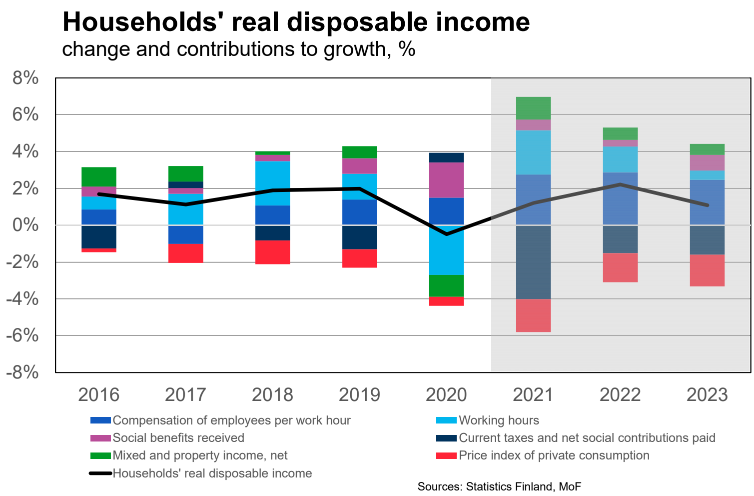
The consumption of services turned to growth in the second quarter, and the trend is expected to accelerate during the second half of the year as sports and cultural events will gradually open. Foreign travel is not expected to return to pre-crisis levels until 2022.

A high savings rate and optimism among consumers will create a basis for rapid growth in private consumption. Private consumption will increase by 3.2% in 2021. In 2022, private consumption will grow by 3.8% and will exceed the pre-COVID-19 levels. As the savings rate decreases, growth in consumption will slow down to 2% in 2023.



A rapid decline in the savings rate is expected in the next few years as most of the savings will be released for consumption. The savings rate will, however, remain positive throughout the outlook period as consumption will remain lower than disposable income.

There was a substantial rise in household debt ratio in 2020 and this year, it will be further increased by a rapid growth in housing loans.



The real disposable income indicating household purchasing power decreased by 0.5% in 2020[1]. The decrease in hours worked last year was the result of extensive lay-offs and redundancies caused by the COVID-19 epidemic.

Household real disposable income is expected to increase by about one per cent in 2021 as the employment situation improves and average earnings rise. The rise in average earnings will be boosted by the elimination of the reduction in employers' pension insurance contributions and the increase in unemployment insurance contributions in 2021.

An increase in hours worked and average earnings will give a further boost to purchasing power in 2022. Prices of private consumption are estimated to rise by just under 2% each year during the outlook period.

1 In the chart, the taxes and social security contributions paid, as well as the price of private consumption, are shown as negative values, because any increase in these items reduces the real disposable income of households.

Table 8. Consumption

	2020	2018	2019	2020	2021**	2022**	2023**
	share, %	change in volume, %					
Private consumption	100.0	1.7	0.7	-4.7	3.2	3.8	2.0
Households	95.8	1.8	0.8	-4.8	3.2	3.9	2.0
Durables	8.1	3.9	3.2	2.4	3.5	1.9	2.0
Semi-durables	7.0	1.5	3.3	-10.7	7.2	5.2	2.6
Non-durable goods	28.8	0.1	-0.6	2.0	0.8	0.4	0.9
Services	51.9	2.5	1.3	-7.8	3.8	5.5	2.1
Consumption by non-profit institutions	4.2	-1.1	-2.8	-1.9	2.5	3.0	2.0
Public consumption		2.0	2.0	0.5	3.6	-0.0	-1.4
Total		**1.8**	**1.1**	**-2.9**	**3.3**	**2.6**	**0.9**
Households´ disposable income		3.2	3.0	0.0	3.0	3.8	2.8
Private consumption deflator		1.3	1.0	0.5	1.8	1.6	1.7
Households´ real disposable income		1.9	2.0	-0.5	1.2	2.2	1.1
		%					
Consumption in relation to GDP (at current prices)		76.0	75.6	75.5	75.4	75.2	74.9
Household savings ratio		-0.5	0.8	4.9	3.1	1.5	0.7
Household debt ratio[1]		127.0	128.6	133.4	136.0	137.0	137.0

[1] Household debt at end-year in relation to disposable income

1.3.2 Public consumption

The largest items in public consumption expenditure are personnel expenses, and goods and services purchased. Local government consumption accounts for about two and central government for one quarter of public consumption, while consumption by social security funds makes up the remainder. In 2023, a significant proportion of municipal and joint municipal authorities' consumption will be transferred to wellbeing services counties.

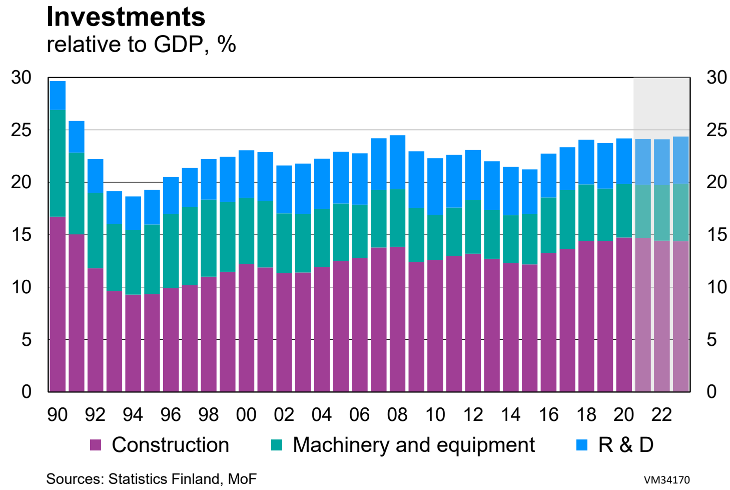
Public consumption expenditure is expected to grow more rapidly this year than in 2020. The COVID-19 epidemic and its prevention by means of protective equipment, testing, tracing and vaccines are significant expenditure items in general government finances. The reduction of the service and care backlog generated during the crisis is also expected to cause expenditure pressures.

In 2022, public consumption expenditure will grow more slowly as the additional spending prompted by the COVID-19 epidemic will decrease. The value of public consumption expenditure will, however, continue to grow in 2022 and 2023 even though the volume of consumption will decline in 2022 as the additional expenditure and other one-off spending increases prompted by the COVID-19 crisis come to an end or will contract substantially.

Public sector collective agreements will expire at the end of February 2022. In the forecast, public sector earnings trends are expected to reflect the estimate of the overall earnings trends from 2022.

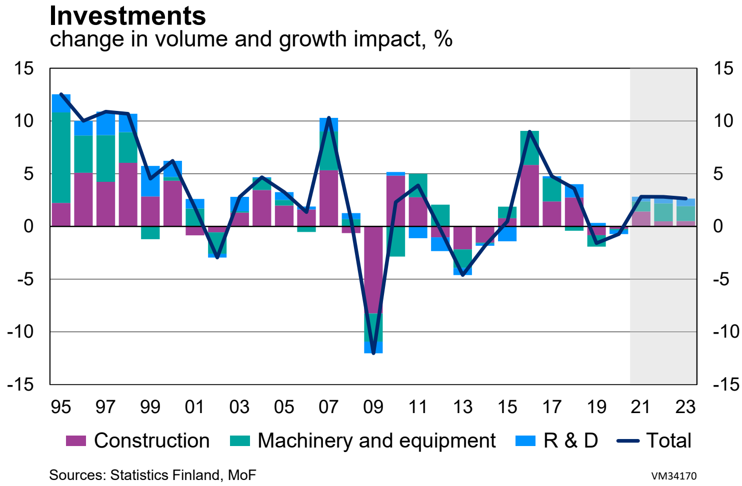
1.3.3 Private investment

According to current data, private investments decreased by 3.4% in 2020, and all investments only by 0.7%. Private investments will increase by 2.9% in 2021, as the estimate of the growth in construction investments is now more optimistic than before. Housing construction will turn to growth already this year. There are also signs of recovery in machinery and equipment investments as the growth prospects for the global economy are improving. The investment prospects for Finnish industries are good, and the funding from the Recovery and Resilience Facility of the EU (RRF) will boost private investments in the period 2021–2023. In the forecast, private investments will grow by 3.7% in 2022 and 4.0% in 2023. They will increase at an average rate of 3.5% during the outlook period and account for almost 20% of GDP in 2023.



Private investments already increased at a moderate rate during the first half of 2021 and the trend in housing construction has been especially positive. There will be more housing starts in 2021 than previously anticipated. Housing starts will total about 42,000, which is more than in previous years, and renovation construction is also expected to grow at a slightly faster rate than last year. Overall, housing construction investments will grow by 4.3% in 2021. Housing construction will contract by one per cent in 2022 but housing starts will still total about 36,000 that year. Towards 2023, housing starts will gradually approach the long-term average and housing construction investments will decline by 0.5% in 2023. The demand for housing loans and housing construction will be sustained by low interest rates.

Non-residential building construction will decrease by 0.3% this year. However, the number of building permits granted during the first half of the year gives cause for optimism, especially in industrial and warehouse construction and there have also been more construction starts in these categories. According to the investment survey carried out by the Confederation of Finnish Industries, a substantial increase in industrial investments is expected this year. For example, Metsä Group has now launched its bioproduct mill project in Kemi. However, there was not yet any growth in commercial and office construction starts in the period January–May. In fact, non-residential building construction is only expected to peak in 2022. Non-residential building construction will grow by 3.2% in 2022 and 2.5% in 2023. As other construction, civil engineering construction will also grow throughout the outlook period. Boosted by the positive trend in building construction starts, civil engineering construction will grow by 2.4% in 2021. The growth will slow down towards the end of the outlook period.



Investments in machinery, equipment and transport stock decreased by 0.6% in 2020 but will increase by 4.5% in 2021 as the business environment stabilises. Machinery and equipment investments will be boosted by industrial investments. Substantial investments in machinery and equipment will be made at the Kemi bioproduct mill towards the end of the outlook period. This means that the positive trend in industrial investments will continue beyond 2021. Investments in machinery and equipment will grow by 8.0% in 2022 and by 6.4% in 2023. Other investments (including RD investments) will grow throughout the outlook period. According to the investment survey by the Confederation of Finnish Industries, the outlook for industrial RD investments for 2021 is positive. During the outlook period, RDI investments will also be generously supported from such instruments as the Recovery and Resilience Facility (RRF).

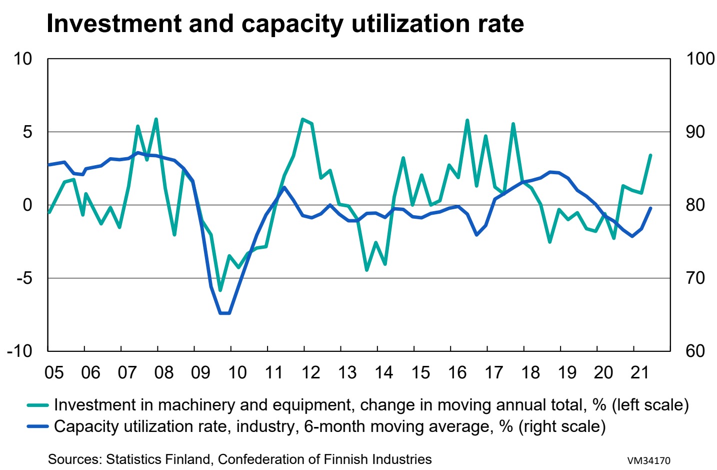


Table 9. Fixed investment by type of capital asset

	2020	2018	2019	2020	2021**	2022**	2023**
	share, %	change in volume, %					
Buildings	51.5	5.6	-0.7	-2.3	2.3	0.8	0.8
Residential buildings	29.3	4.7	-4.2	-2.5	4.3	-1.0	-0.5
Non-residential buildings	22.3	6.9	4.5	-2.0	-0.3	3.2	2.5
Civil engineering construction	9.4	0.1	-5.3	10.7	2.4	1.0	1.2
Machinery and equipment	21.1	-1.7	-4.9	-0.6	4.5	8.0	6.4
R&D-investments[1]	18.0	7.1	1.9	-2.0	2.5	3.5	4.0
Total	**100.0**	**3.6**	**-1.6**	**-0.7**	**2.8**	**2.8**	**2.6**
Private	79.6	3.1	-2.4	-3.4	2.9	3.7	4.0
Public	20.4	5.9	2.4	11.0	2.6	-0.6	-3.1
		%					
Investment to GDP ratio (at current prices)							
Fixed investment		24.1	23.7	24.2	24.1	24.1	24.4
Private		19.8	19.4	19.3	19.2	19.3	19.8
Public		4.3	4.4	4.9	4.9	4.8	4.6

[1] Includes cultivated assets and intellectual property products

1.3.4 Public investment

Public investments account for about 20% of all investments. Local government investments account for more than half of the total, while central government investments account for the rest. The proportion of social security funds is very small. From 2023 onwards, local government investments will be partially transferred to wellbeing services counties. These investments account for about 10% of all public investments. Almost 30% of all public investments are civil engineering investments, and other construction investments account for a same proportion of the total. Research and development investments account for just over 25% and machinery and equipment investments for just over 10% of the total.

Public investments have been high in recent years, accounting for over 4% of GDP. In Finland, public investments account for a considerable higher proportion of GDP than in EU countries on average.

The stimulus measures launched by Prime Minister Marin's Government and the measures set out in the Government Programme have raised public investments to a high level, and this year, further increases are expected. Central government investments will be boosted by transport infrastructure projects as well as research, development and innovation inputs. Local government investments have also reached high levels. Driven by health and social services construction and municipal infrastructure construction, they are expected to remain at high level in 2021.

Public investments will decrease slightly from 2022 onwards as transport infrastructure investments decline, but they will remain at high level. Public investments are expected to contract further at the end of the outlook period. A fall in hospital construction is the main reason for the decline. Several new hospitals have been built in recent years and the university hospital modernisation projects are now at their final stages, This means that the busiest hospital construction period is coming to an end.

1.4 Domestic procuction

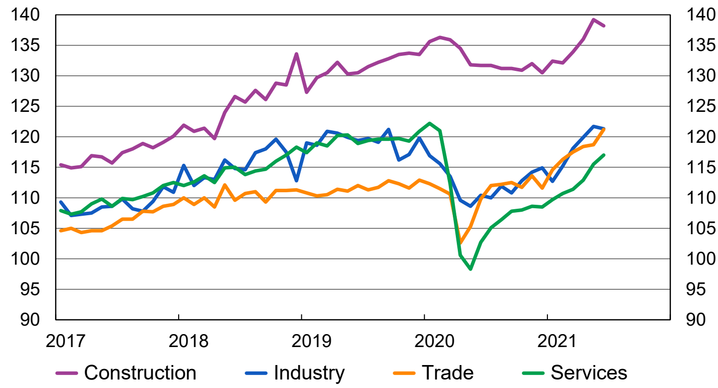
1.4.1 Total output

The preliminary figures of the national accounts for 2020 published in July did not change the estimates of last year's GPD growth (-2.9%). The new data on main sectors differed significantly from the figures published in March. Industrial production contracted significantly less than previously estimated, whereas services and construction decreased significantly more than indicated by preliminary figures. Accommodation and catering (-33%) and transport and warehousing (-26%) were the sectors experiencing the sharpest falls in output last year. In an exception to other sectors, value added grew substantially in the electrical and electronics industries and in information and communication services.

In the second quarter of this year, the Finnish economy grew by about 2% quarter to quarter. There was brisk growth in both services and industrial output. As the growth peaked earlier than projected, their growth is projected to slow down in the third quarter. Improved economic prospects and low interest rates have boosted the demand for construction, which has been reflected in the higher number of building starts. Housing construction has reached near-record levels. The demand for Finnish exports grew rapidly during the first half of the year, which means that demand will be stronger than forecast, especially in industries. The extensive investment plans announced by companies are also one reason why the economic growth forecast has been revised upwards. Primary production is also expected to grow more rapidly than last year, mainly due to brisk demand for forestry products. Finland's GDP is expected to grow by 3.3% in 2021.

Turnover trends in main sectors

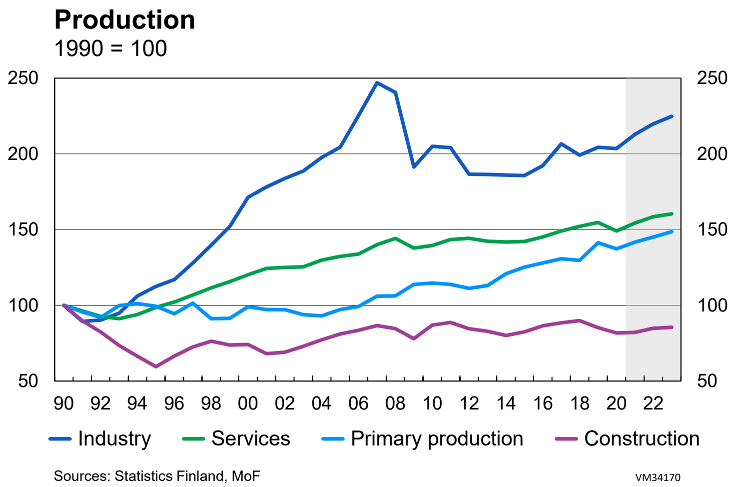
2015 = 100, seasonally adjusted



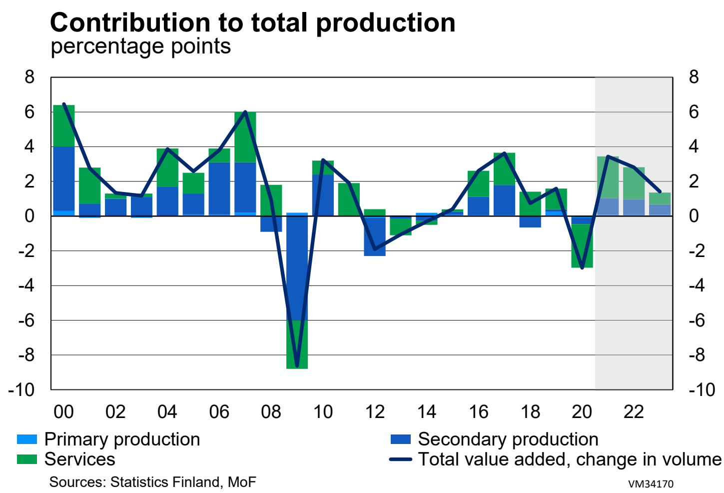
Source: Statistics Finland

Turnover in all main sectors increased during the first half of 2021. The turnover of services is still slightly below 2019 levels. The COVID-19 epidemic has not had much effect on the turnover in the construction sector. A rapid increase in producer prices and a shortage of components are the main challenges facing companies. There is also a shortage of skilled labour, especially in the service sector.

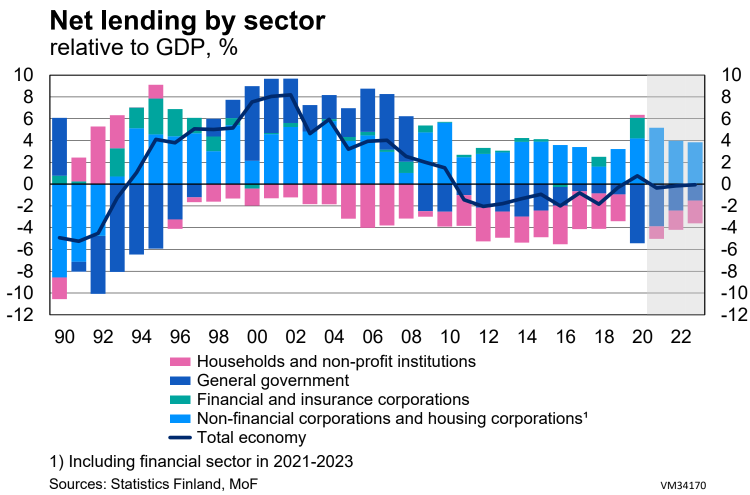
Finland's gross domestic product is expected to grow by 2.9% in 2022. Driven by exports and investments, rapid growth in industrial sectors is expected to continue. In accommodation, catering and transport services, the growth will continue at an above-average level. However, most of the growth can be attributed to a carry-over effect from 2021 and GDP growth between January and December 2022 is close to normal. At annual level, the GDP of 2019 will only be exceeded in 2022.



In 2023, the Finnish economy will return close to its long-term average growth rate and the output gap will gradually close. Services account for about 70% of Finland's economic output. In the next few years, they will contribute to Finland's GDP growth more than the other main sectors.



Economic productivity per employed person decreased by 1.4% in 2020 and will increase in average by 1.2% in 2021-2023. Productivity per hours worked remained at the previous year's level and it also grows at an annual rate of around one per cent. The operating surplus contracted by 2.3% last year. In the next few years, it is expected to grow more rapidly, at a rate of between 4.5 and 6.5 per cent. Unit labour costs in Finland will increase at an average annual rate of about two per cent between 2021 and 2023.

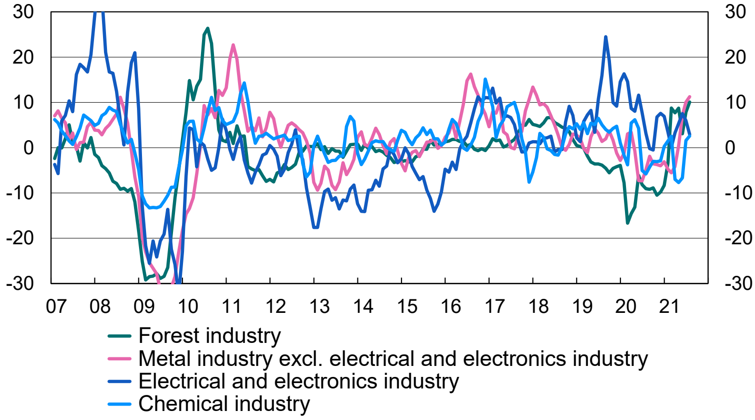


1.4.2 Secondary production

The publication of national accounts in July prompted changes in figures on individual sectors for 2020. Instead of decreasing by more than ten per cent, the output of Finland's forest industry only fell by about two per cent in 2020. At the same time, according to revised figures, chemical industry output contracted by 11.4% (instead of 1.4%). Oil refining accounted for most of the decrease (it declined by more than 60%). The earlier figures already indicated that electrical and electronics industry did well in 2020 but according to the latest figures, the growth was more than 16%. The metal industry contracted by two per cent last year.

Volume index for industrial production

3-month moving average, change yoy, %

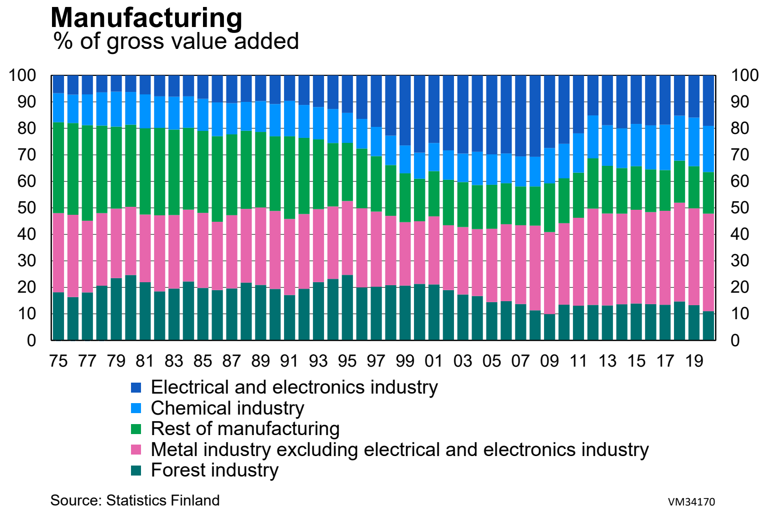


Source: Statistics Finland VM34170

Industrial orders have grown briskly in the first half of the year and in some sectors, they are at record levels. According to the business tendency survey for July, industrial companies are optimistic about the future, even though in their view, the growth has already peaked. Shortage of skilled labour is again the most serious obstacle to growth.

The Kemi bioproduct mill, the largest investment project in Finland's industrial history, will be built over the next two years. The construction project will give a particularly strong boost to the demand for metal industry products. The metal industry accounts for most of the industrial value added. The chemical industry is the second-largest industrial sector and its size is about 50% of the metal industry.

A broad-based recovery of the global economy in the coming years is expected to sustain growth in the manufacturing industry throughout the outlook period until 2023. Most of the industrial output is exported. In the last year of the forecast, industrial production will grow at a slower rate and growth will approach the long-term average.

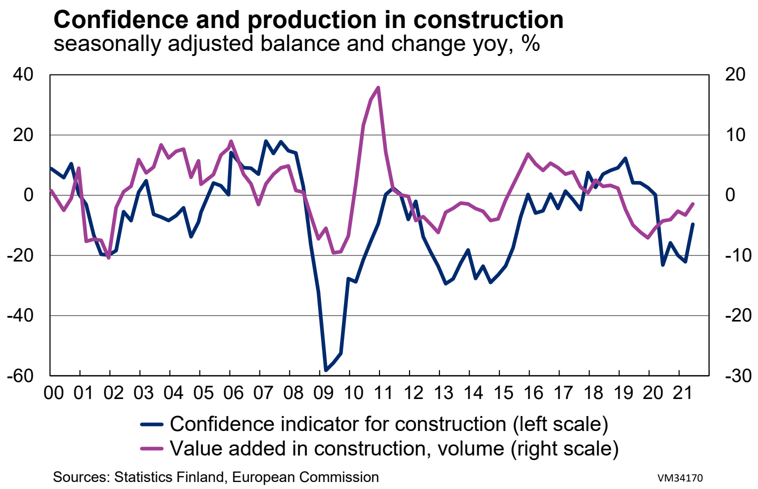


Construction

Value added in construction decreased by more than four per cent last year, even though there was a strong increase in building starts during the second half of the year. Residential construction already started to pick up last autumn and the pace has accelerated this year. At the end of June, the annual total of housing starts stood at 48,500. However, housing starts will probably decrease towards the end of this year and the total for 2021 is expected to be about 42,000. Housing market has been boosted by an increase in household savings and rising employment.

Expectations in the construction sector have improved. It is expected that the strong increase in rental housing supply during the last few years will lead to a gradual decline in housing starts. In 2022, housing starts are expected to decline and total between 36,000 and 37,000. In 2023, the figure is expected to be between 32,000 and 33,000.

The construction is almost evenly divided between renovation and new construction. Renovation construction grew only slowly in 2020, but this year, an increase in housing company renovation projects is expected. Renovation construction is expected to grow by about 2% each year during the outlook period.



Non-residential construction was still on the decline during the first half of the year but companies' investment plans indicate a change for the better. Utilisation rates of commercial premises have decreased as a result of the COVID-19 epidemic. Despite this, non-residential construction is continuing at a rapid pace in the Helsinki Metropolitan Area. The new Kemi bioproduct mill will give a significant boost to construction in northern Finland.

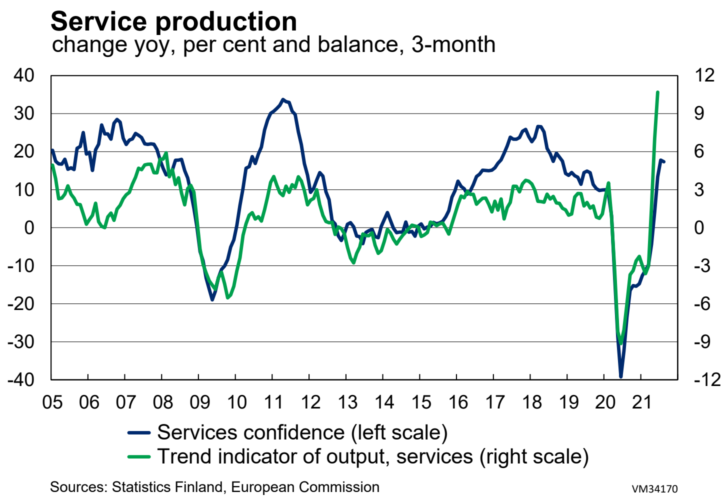
Boosted by public sector stimulus measures, civil engineering construction grew rapidly last year. Brisk growth has continued during the first half of the year, both in nominal and real terms.

The year 2021 will still be a period of slow growth in the construction sector. A growth peak can be expected in 2022, as the sector still contracted in the first quarter of this year. Next year construction growth will be over 3 per cent.

1.4.3 Services

Service production decreased by 3.6% in 2020, which was more than indicated by preliminary figures but nevertheless significantly less than during the financial crisis in 2009. Air and water transport, travel agencies, accommodation and catering, health services, arts, entertainment and recreation were the main sectors experiencing double-digit falls in demand. At the same time, household services, insurance, publishing and data processing services grew substantially in 2020. Brisk growth was also recorded in retail and wholesale trade (excluding cars).

According to the business tendency survey, the service sector expects growth to continue throughout the year. The business confidence indicator has followed the service business trend indicator quite accurately. Services may actually grow at a faster rate than forecast because the service sector purchasing managers' indexes in the euro area for August indicate growth despite the delta variant of COVID-19.



Information and communications remain the cornerstone of Finland's service industries and it is also the only industrial sector in our country that has grown continuously for more than ten years. The increase in industrial production and household consumption will also boost growth in services in the coming years. Similarly, the strengthening of export demand will also be reflected in the growing demand for business services. This year, service production is projected to increase by 3.5%. Growth will slow down in 2022, but a growth spillover will keep growth at 2.7%. In 2023, growth will return close to its long-term average.

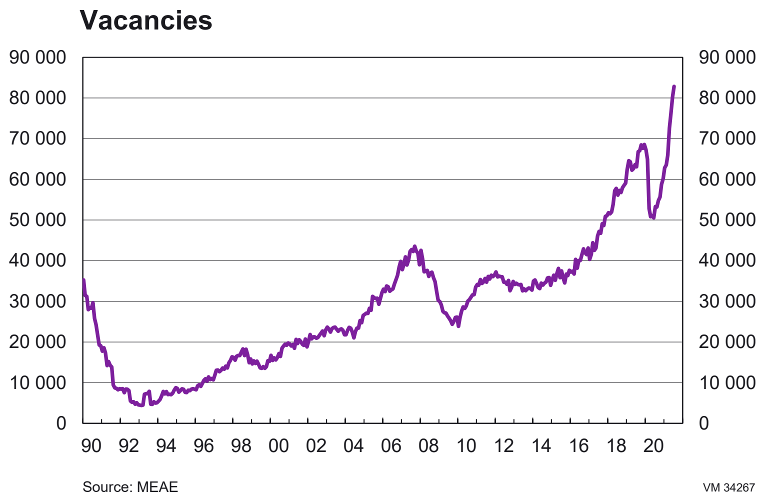
Table 10. Production by industry

	2020	2018	2019	2020	2021**	2022**	2023**
	share, %[1]	change in volume, %					
Industry	20.3	-3.6	2.6	-0.4	4.4	3.3	2.3
Construction	7.5	1.7	-5.1	-4.1	0.6	3.2	0.8
Agriculture and forestry	2.8	-0.8	9.0	-2.8	3.1	2.4	2.4
Industry and construction	27.8	-2.3	0.5	-1.4	3.4	3.2	1.9
Services	69.4	2.0	1.7	-3.6	3.5	2.7	1.2
Total production at basic prices	**100.0**	**0.7**	**1.6**	**-3.0**	**3.4**	**2.8**	**1.4**
GDP at market prices		1.1	1.3	-2.9	3.3	2.9	1.4
Labour productivity in the whole economy		-1.6	0.3	-0.0	1.0	1.4	0.9

[1] Share of total value added at current prices

1.5 Labour force

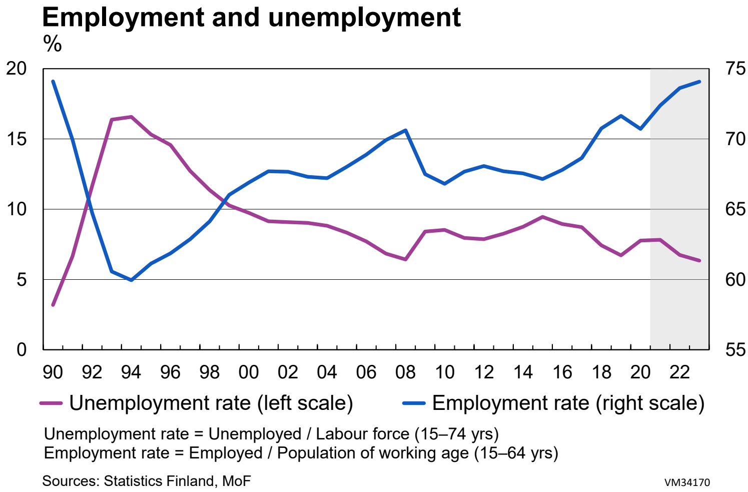
Growth in employment has significantly accelerated in the first half of the year. In June, the number of employed persons was 2.1% or more than 50,000 higher than at the end of last year. When compared to June 2019, the number of employed persons had also increased by tens of thousands. During the first half of the year, the number of employees and entrepreneurs increased by tens of thousands year on year. Among employees, there was a particularly strong increase in fixed-term and part-time work, whereas full-time work decreased. Employment growth was particularly strong in primary production, in a small number of private services and in public administration. At the same time, there was a fall in the number of employed persons in secondary production. The number of hours worked increased by 1.9%.



There is a strong demand for labour, and in a number of sectors, the potential is even higher. According to business confidence surveys, employment expectations have risen in the main sectors during the summer months. Especially in a number of service sectors, shortage of skilled workforce is gradually becoming a problem. In fact, there are plenty of job opportunities on offer, as employers have made a record number of vacancies available through labour administration. The more extensive survey-based statistics on vacancies produced by Statistics Finland also indicate that the number of job vacancies is now high. Medium-sized and large companies in southern Finland have significantly more vacancies that are difficult to fill than in previous years.

Last year, companies adjusted their labour costs through redundancies and lay-offs. By the summer of 2021, the number of lay-offs had fallen to one third of last year's figures and the number of lay-offs started in late summer has decreased to the level of 2019.

The increase in vaccination rates during the second half of the year will boost the confidence that the Finnish economy will gradual open. Nevertheless, the fact that the disease will not fully disappear will put the lifting of restrictions on business operations on an uncertain basis and the growth in employment is expected to slow down during the second half of the year. Due to the very rapid increase in employment in the first half of the year, employment growth will exceed 2% this year, even though the rate of growth will slow down at the end of the year due to the uncertainty of the disease situation. Employment rate will reach 72.5% in 2021, partially due to a fall in the number of working-age people.



The demand for labour is sustained by economic growth and in the short term, which can be met by the large number of unemployed persons and the government measures to increase the supply of labour. Economic recovery will boost the number of employed persons in 2022 and 2023, especially in the service sectors. The number of employed persons is expected to increase by 1.5% in 2022. As the economy loses strength, the growth will slow down in 2023 but the employment rate will exceed 74% in 2023.

Strong employment growth usually leads to a rapid fall in unemployment. However, this has not happened during the first half of the year as growth in employment has come from outside the labour force. As a result, labour market participation has reached record levels, while at the same time, the number of unemployed has increased. The unusual situation is partly due to a sharp increase in lay-offs last year as many of the laid-off people were entered in the statistics as being outside the labour force. This year laid-off people have been re-employed, which means that there has been no simultaneous fall in unemployment. Unemployment is still higher among elderly men and women than a year ago and especially two years ago. Long-term unemployment is also in the increase.

According to Statistics Finland, unemployment was 12.4% higher in the first half of 2021 than in the same period last year. However, there was no longer any growth in the unemployment trend in summer and steady growth in employment will also gradually reduce the number of unemployed. However, unemployment rate will rise slightly, to 7.8%, due to the increase during the first half of the year. In particular, the recovery of the service sector next year will speed up the downward trend in unemployment and the jobless rate will fall below 7%. Provided that the labour market mismatches and region-specific or occupation-specific availability of labour does not become an obstacle to the functioning of the labour market (as is assumed in the forecast), unemployment rate will fall to below 6.5% in 2023. This is still slightly above the level of structural unemployment in Finland estimated using the method jointly developed with the European Commission.

Table 11. Labour market

	2018	2019	2020	2021**	2022**	2023**
	annual average, 1,000 persons					
Population of working age (15–74 yrs)	4124	4128	4133	4125	4113	4102
change	10	4	5	-8	-12	-11
Population of working age (15–64 yrs)	3439	3428	3421	3414	3408	3406
change	-12	-11	-7	-7	-6	-2
Employed (15–74 yrs)	2507	2533	2494	2548	2586	2601
of which 15–64 yrs	2433	2456	2419	2471	2509	2523
Unemployed (15–74 yrs)	201	183	209	216	187	176
	%					
Employment rate (15–64 yrs)	70.7	71.6	70.7	72.4	73.6	74.1
Unemployment rate (15–74 yrs)	7.4	6.7	7.7	7.8	6.7	6.3
	1,000 persons per annum					
Immigration, net	12	15	18	20	20	20

1.6 Incomes, costs and prices

1.6.1 Wages and salaries

During the first half of 2021, the rise in nominal earnings accelerated to 2.2% year on year. The acceleration was due to higher negotiated pay increases as wage drifts remained more or less at last year's levels (at about 0.5%). Nominal earnings grew faster in manufacturing and in a number of private business services. At the same time, there was a substantial slowdown in the rate of increase in trade and especially in real estate services. The rate of growth in real earnings was halved (to slightly more than 0.5%) as inflation accelerated to slightly more than 1.5%.

The pay increases negotiated for this year have already mainly been implemented. Many of the collective agreements now in effect will also expire during the last months of this year, in early 2022 and next spring. During the past two decades, the average duration of collective agreements has been nearly two years. The pay increases set for the first year of these agreements have usually been higher than the increases set for the last year of the previous agreements.

The forecast assumes that the increase in earnings for 2022 and 2023 will be linked to the predicted slower growth in productivity. At the same time, an increase in the level of economic activity and the resulting rise in employment as well as labour shortages in some sectors are expected to boost wage drifts. Nominal earnings are expected to increase by about 3% in 2022 and about 2.5% in 2023.

The wage bill increased by 4.5% during the first half of the year. The wage bill increased more rapidly when the earnings of employed persons increased. Thus, the rate of wage bill growth was even faster than the steady rise in employment would have suggested. In addition to nominal earnings, the wage bill is also affected by employment trends. As the rate of growth in employment and nominal earnings accelerates, the wage bill is expected to increase by 4.5% this year. Earnings are expected to rise more rapidly next year but employment will probably grow more slowly and thus, the wage bill will increase by about 4.5% in 2022. A slower rise in earnings and growth in employment will also slow down the increase in the wage bill in 2023, and that year, the wage bill is expected to increase by about 3%.

Table 12. Index of wage and salary earnings and labour costs per unit of output

	2018	2019	2020	2021**	2022**	2023**
	change, %					
Index of negotiated wage rates	1.2	2.0	1.3	1.8	2.3	1.8
Wage drift, etc.	0.5	0.1	0.6	0.5	0.7	0.7
Index of wage and salary earnings	**1.7**	**2.1**	**1.9**	**2.3**	**3.0**	**2.5**
Real earnings[1]	0.6	1.1	1.6	0.5	1.4	0.8
Average earnings[2]	2.1	2.0	2.4	2.1	3.1	2.6
Labour costs per unit of output whole economy[3]	2.8	1.8	1.8	1.7	2.6	1.7

[1] The index of wage and salary earnings divided by the consumer price index.

[2] Computed by dividing the national wage bill by the number of hours worked by wage and salary earners. The figures are affected by structural changes in the economy.

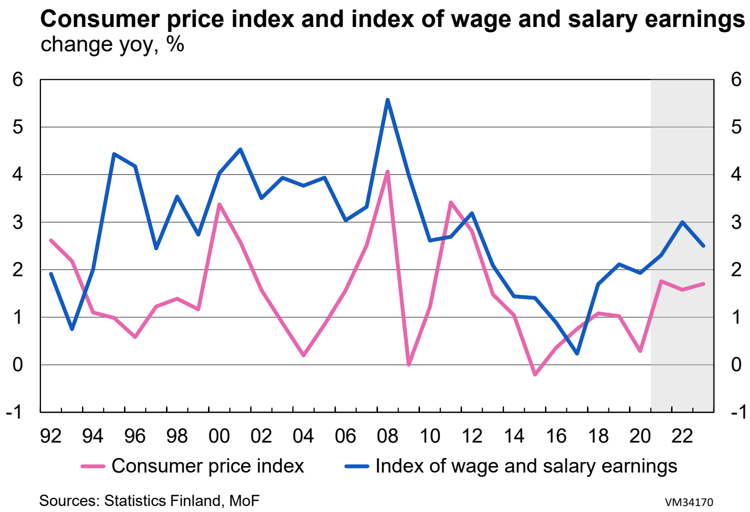
[3] Compensation of employees divided by gross value added in volume at basic prices.

1.6.2 Consumer prices

The consumer price index rose by almost two per cent during the first half of 2021 year on year. Rising energy prices and food prices have been the biggest factors behind faster inflation. The rise in service prices has continued at a steady rate and has remained slower than average. Fresh food prices have decreased during the first half of the year. Rises in raw material prices and component shortages have not been passed on to goods prices, which have been on a steady decline.

Measured with the national consumer price index, an inflation rate of 1.8% is forecast for 2021. Rising energy prices have been a factor behind faster inflation but the impact will gradually turn into negative as the estimate is that crude oil prices have already peaked, while futures prices are falling.

The rise in earnings is more clearly reflected in the prices of services and further in consumer prices. Increase in service prices is the biggest single factor sustaining inflation in the coming years. The baseline inflation will also remain positive. The national consumer price index is expected to rise by 1.6% in 2022 and by 1.7% in 2023.


Consumer price index and index of wage and salary earnings
change yoy, %
6
5
4
3
2
1
0
-1
92 94 96 98 00 02 04 06 08 10 12 14 16 18 20 22
Consumer price index
Index of wage and salary earnings
Sources: Statistics Finland, MoF
VM34170

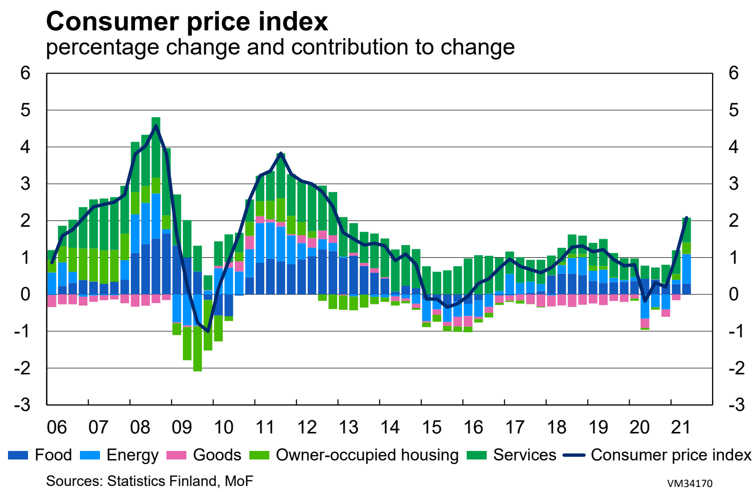

Consumer price index
percentage change and contribution to change
6
5
4
3
2
1
0
-1
-2
-3
06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21
Food
Energy
Goods
Owner-occupied housing
Services
Consumer price index
Sources: Statistics Finland, MoF
VM34170

Table 13. Price indices

	2018	2019	2020	2021**	2022**	2023**
	change, %					
Export prices[1]	4.1	-0.3	-4.2	4.2	1.9	1.6
Import prices[1]	3.3	0.4	-5.1	4.4	2.2	1.7
Consumer price index	1.1	1.0	0.3	1.8	1.6	1.7
Harmonised index of consumer prices	1.2	1.1	0.4	1.8	1.6	1.8
Basic price index for domestic supply, including taxes	4.7	1.0	-3.3	6.6	2.3	2.0
Building cost index	2.2	1.0	-0.2	3.4	2.4	2.2

[1] As calculated in the National Accounts

2 General government finances

2.1 General government

Driven by the COVID-19 epidemic, Finland's general government deficit reached substantial proportions in 2020. General government finances weakened by an economic downturn and the support measures prompted by the epidemic. The rapid economic growth after the downturn will improve public finances this year, but the general government deficit will remain high. Economic growth and a sharp reduction in the support measures prompted by the COVID-19 situation will also strengthen general government finances in 2022. However, general government finances will still remain in deficit after a short period of economic upturn. Thus, the structural imbalance between general government expenditure and revenue will persist.

Last year, general government debt-to-GDP ratio reached a level that is ten percentage points higher than before the crisis. Growth in the debt ratio will slow down next year, but will then accelerate again, reaching just over 73% by the middle of the decade. The general government debt-to-GDP ratio will remain at a significantly higher level than at the end of the 2010s.

Central government has borne most of the expenses of the support measures prompted by the COVID-19 epidemic. In fact, central government is the general government sector with the highest deficit. The active fiscal policy pursued by central government helped to stimulate the economy last year and it will also maintain the level of economic activity this year. Finland's fiscal stance is described in more detail in the box on page x. Driven by economic growth and helped by the end of the support measures, central government deficit will decrease during the outlook period.

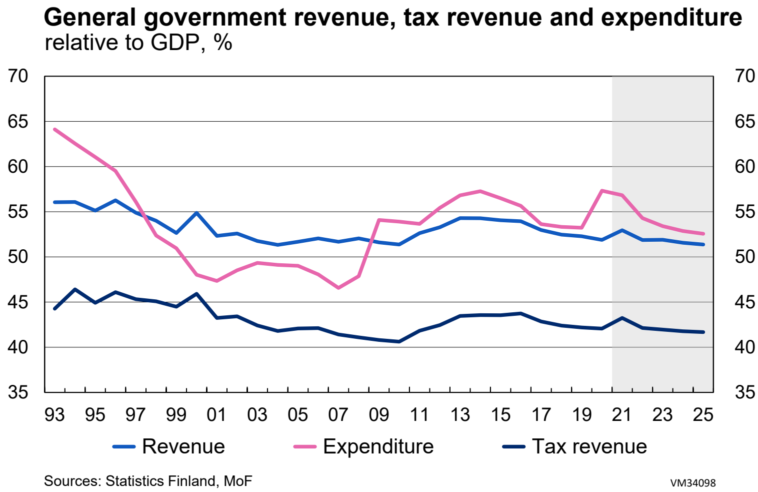
Local government budgetary position turned into a slight surplus last year. This was mainly the result of the extensive central government support measures. In 2021 and 2022, local government budgetary position will again be in deficit. In 2023, the structure of Finland's general government will change as the responsibility for health and social services and rescue services will be transferred from municipalities to wellbeing services counties. This will ease the structural spending pressures facing municipalities resulting from the ageing population. The wellbeing services counties will start with a slight deficit, which is caused by sizeable investments.

Last year, the surplus of employment pension institutions decreased significantly due to the temporary reduction in pension contributions, and a fall in contribution and property income. The financial position of employment pension institutions will be restored to its pre-crisis due to the end of the temporary reduction in contributions and strong growth in contributions accompanying a rise in employment. The surpluses will, however, remain fairly moderate in the coming years as pension expenditure continues to grow and very low interest rates slow down growth in the institutions' property income.

The surplus of the other social security funds turned into a deficit last year. Their financial position was weakened by extensive lay-offs, higher unemployment and temporary extensions in unemployment security. Increase in unemployment insurance contributions in 2021 and 2022 will ease the situation of the other social security funds. Unemployment will also decrease from next year, which will strengthen other social security funds.

General government expenditure rate (spending-to-GDP ratio) rose rapidly last year. The expenditure rate will fall during the outlook period as the temporary support measures expire and unemployment-related expenditure declines. After falling in 2020, the tax rate (ratio of taxes and tax-like payments to GDP) will rise again this year, as the economic recovery will cause tax revenue to increase faster than GDP. After that, the tax rate will fall as indirect tax revenue will increase more slowly than the GDP.

The most important risks affecting general government finances are still related to overall economic developments. New coronavirus mutations may postpone the economic recovery and weaken general government finances if economic growth slows down and epidemic-related expenditure increases again.


General government revenue, tax revenue and expenditure
relative to GDP, %
70
65
60
55
50
45
40
35
93
95
97
99
01
03
05
07
09
11
13
15
17
19
21
23
25
Revenue
Expenditure
Tax revenue
Sources: Statistics Finland, MoF
VM34098

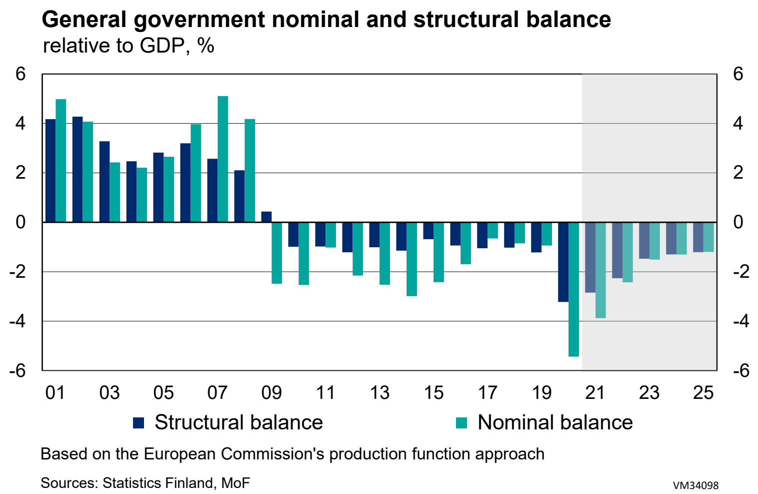

General government nominal and structural balance
relative to GDP, %
6
4
2
0
-2
-4
-6
01
03
05
07
09
11
13
15
17
19
21
23
25
Structural balance
Nominal balance
Based on the European Commission's production function approach
Sources: Statistics Finland, MoF
VM34098

Table 14. General government finances[1]

	2018	2019	2020	2021**	2022**	2023**
	EUR billion					
Current taxes	37.4	38.4	37.9	40.9	41.3	42.5
Taxes on production and imports	33.0	33.6	33.1	35.4	36.1	36.8
Social security contributions	27.9	28.6	27.6	30.5	31.6	32.9
Taxes and contributions, total[2]	99.0	101.3	99.4	107.6	109.9	113.0
Other revenue[3]	24.2	25.0	24.0	25.0	26.2	27.6
of which interest receipts	1.7	1.6	1.3	1.3	1.4	1.5
Total revenue	**122.5**	**125.6**	**122.6**	**131.8**	**135.3**	**139.8**
Consumption expenditure	53.5	55.6	57.7	61.0	62.6	63.3
Subsidies	2.6	2.6	4.2	4.3	2.8	2.9
Social security benefits and allowances	43.0	43.8	46.4	47.1	47.6	48.7
Other current transfers	5.6	5.8	6.7	6.6	6.7	6.6
Subsidies and current transfers, total	51.2	52.1	57.3	58.0	57.0	58.2
Capital expenditure[4]	10.3	10.9	11.8	13.6	13.2	13.0
Other expenditure	9.5	9.1	8.6	8.9	8.8	9.4
of which interest expenses	2.1	2.0	1.6	1.3	1.0	0.9
Total expenditure	**124.5**	**127.8**	**135.4**	**141.4**	**141.6**	**143.9**
Net lending (+) / net borrowing (-)	-2.0	-2.3	-12.8	-9.7	-6.3	-4.1
Central government	-2.9	-2.6	-13.1	-10.4	-7.2	-4.7
Local government	-2.0	-3.0	0.0	-1.1	-1.8	-2.0
Wellbeing services counties						-0.7
Employment pension schemes	2.4	2.7	0.4	2.0	2.4	2.6
Other social security funds	0.6	0.6	-0.2	-0.2	0.2	0.7
Primary balance[5]	0.1	-0.3	-11.3	-8.3	-5.3	-3.1

[1] As calculated in the National Accounts

[2] Incl. capital taxes

[3] Incl. capital transfers and consumption of fixed capital

[4] Gross fixed capital formation and capital transfers

[5] Net lending excluding gross interest expenses

Table 15. Main economic indicators in general government

	2018	2019	2020	2021**	2022**	2023**
	relative to GDP, %					
Taxes and social security contributions	42.4	42.2	42.1	43.2	42.1	42.0
General government expenditure[1]	53.3	53.2	57.3	56.8	54.3	53.4
Net lending	-0.9	-0.9	-5.4	-3.9	-2.4	-1.5
Central government	-1.3	-1.1	-5.5	-4.2	-2.8	-1.7
Local government	-0.9	-1.2	0.0	-0.4	-0.7	-0.7
Wellbeing services counties						-0.3
Employment pension institutions	1.0	1.1	0.2	0.8	0.9	1.0
Other social security funds	0.2	0.3	-0.1	-0.1	0.1	0.2
Primary balance[2]	0.0	-0.1	-4.8	-3.3	-2.0	-1.2
General government debt	59.8	59.5	69.5	71.2	71.3	72.2
Central government debt	45.0	44.3	52.9	55.1	55.3	55.9
General government employment, 1,000 persons	634	653	656	661	672	663
Central government	135	138	140	140	140	140
Local government	486	502	503	509	519	263
Wellbeing services counties						248
Social security funds	13	13	13	13	13	13

[1] EU-harmonized definition

[2] Net lending excluding gross interest expenses

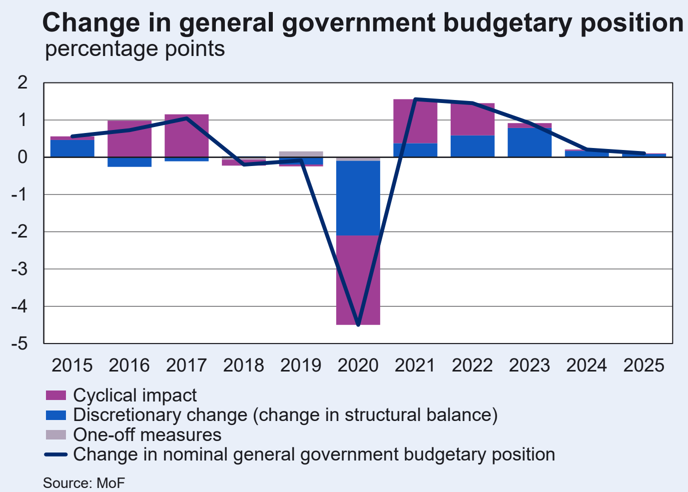
Table 16. Fiscal balance and debt ratios in some EU economies

	2019	2020	2021**	2019	2020	2021**
	Fiscal balance			Debt		
	relative to GDP, %					
*Finland	-0.9	-5.4	-3.9	59.5	69.5	71.2
Finland	-1.0	-5.4	-4.6	59.5	69.2	71.0
United Kingdom	-2.3	-12.3	-11.8	85.2	102.1	108.2
Sweden	0.6	-3.1	-3.3	35.0	39.9	40.8
Denmark	3.8	-1.2	-2.1	33.3	42.2	40.2
Ireland	0.5	-5.0	-5.0	57.4	59.5	61.4
Spain	-2.9	-11.0	-7.6	95.5	120.0	119.6
The Neatherlands	1.8	-4.3	-5.0	48.7	54.5	57.9
Luxembourg	2.4	-4.1	-0.4	22.0	24.9	27.0
Portugal	0.1	-5.7	-4.7	116.8	133.6	127.2
Austria	0.6	-8.9	-7.6	70.5	83.9	87.2
Germany	1.5	-4.2	-7.5	59.7	69.8	73.0
France	-3.1	-9.2	-8.5	97.6	115.7	117.4
Belgium	-1.9	-9.4	-7.6	98.1	114.1	115.3
Italy	-1.6	-9.5	-11.7	134.6	155.8	159.8
Greece	1.1	-9.7	-10.0	180.5	205.7	208.8

Sources: EU Commission Spring Forecast 2021; *Finland: Ministry of Finance, Autumn 2021

Fiscal stance

In 2020, fiscal policy was expansionary. It can be said that fiscal stance was correctly timed because last year also marked the deepest point of the downturn. This year, the Finnish economy has been rapidly recovering from the low point experienced in 2020. Fiscal stance becomes more or less neutral or slightly contractionary when measured with the change in structural (cyclically adjusted) budgetary position. However, compared with the year 2019, fiscal policy is expansionary but the scale of the stimulation will no longer increase from 2020. From next year, fiscal policy will become more contractionary as many of the support measures prompted by the COVID-19 epidemic will expire.



Consolidation of the general government budgetary position in 2021 and 2022 is to a large extent due to cyclical factors. From 2023 onwards, economic growth will slow down and it will return to its potential level.

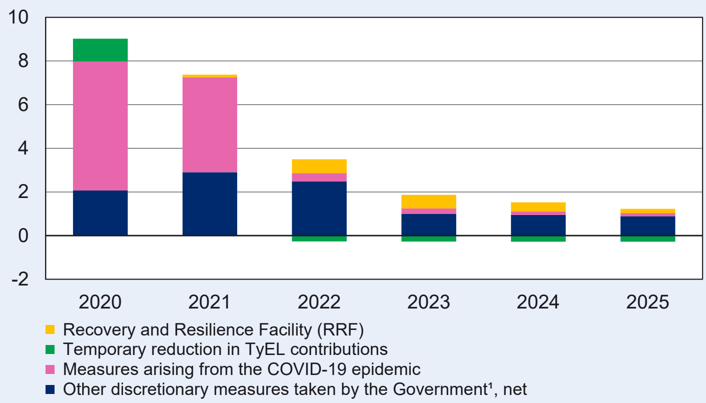
The chart below describes the cumulative size of the measures introduced by the Government that impact general government revenue and expenditure each budget year. The Technical General Government Fiscal Plan of spring 2019 is used as the baseline. General government measures impacting the budgetary position recognised in the national accounts[1]

total about EUR 9 billion (for 2020) and about EUR 6 billion (for 2021). The measures for 2022 total only about EUR 3 billion.

The expenditure for 2020 and 2021 was substantially boosted by the COVID-19 pandemic, and the Government Programme already envisaged expenditure increases for 2020.

According to the current estimates, Finland will receive about EUR 2.1 billion in grants from the Recovery and Resilience Facility (RRF) of the EU. RRF is not expected to have any impact on general government budgetary position as the assumption in the forecast is that the revenue matches the expenditure. The assumption is based on the preliminary Eurostat[2] estimate on the recording of RRF in statistics on public finances. Distribution of the expenditures in different years in the period 2023–2023 is based on a technical assumption and may still change.

Discretionary Government measures
EUR bn



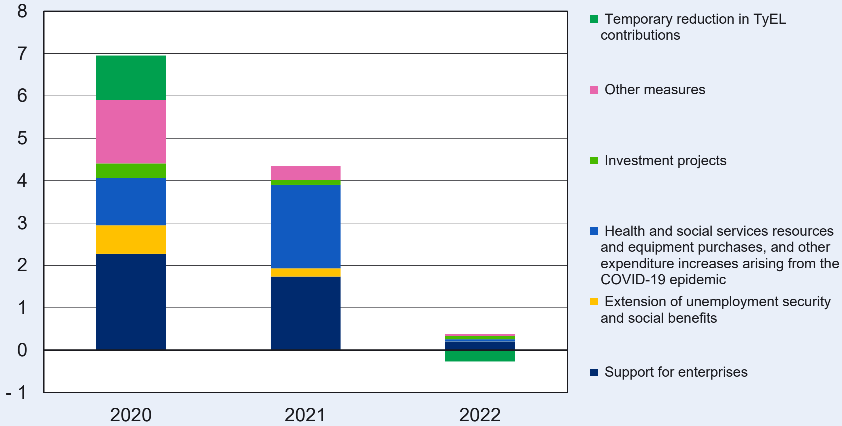
[1] Including those set out in the Government Programme

Source: MoF

Chart 3 describes the allocation of the appropriations budgeted to deal with the COVID-19 epidemic (shown as a purple bar in Chart 2). Support for enterprises and health security are the most important items for which appropriations have been allocated. The measures and their scale are detailed from the on-budget perspective in Table 5 of the appendix to the economic survey.

In addition to these measures, which have a direct impact on general government revenue and expenditure, the Government has also decided on indirect support measures. Providing Finnvera with additional guarantee authorisations and easing of tax payment terms are the most important of these measures.

Measures directly impacting general government revenue and expenditure
EUR bn



Source: MoF

General government expenditure as a counter-cyclical policy instrument: estimates of fiscal policy effectiveness

Fiscal policy means discretionary changes in public spending and taxes aimed at stabilising the economy or influencing incentives of economic actors and income distribution. This box examines the impact of general government spending and the effectiveness of fiscal policy.

In economics, the impact of fiscal policy is measured by means of fiscal multiplier. Fiscal multiplier gives the ratio of GDP growth to public spending growth in euros. The most interesting question from the perspective of fiscal policy effectiveness is whether the multiplier is above or below one. If the multiplier is higher than 1, GDP is growing more rapidly than the general government spending set out in the forecast. In that case, fiscal policy is expansionary. If the multiplier is lower than 1, general government spending is crowding out value added generated by the private sector.

Fiscal policy impacts

Fiscal policy has both direct and indirect impacts on the economy. The direct impact of changes in public spending manifests itself in mechanical change in total demand. If fiscal policy only had direct impacts, GDP would simply grow at the same rate as public spending. However, the effectiveness of fiscal policy is determined on the basis of its indirect impacts, which arise when households and companies react to changes in public spending.

Indirect fiscal policy impacts are felt in the economy through two contradictory mechanisms. The multiplier process stimulating the economy and boosting macroeconomic activity may arise if, as a result of higher public spending, households accumulate additional income that is channelled into consumption. Higher income leads to higher total demand and consumption. The end result may be a situation in which total demand has grown faster than the expenditure increase.

Growth in public spending may also reduce or replace private demand. When public spending increases, the demand for goods and labour required for the public sector output increases. This causes prices and wages to rise in the whole economy and as a result, private companies may have fewer incentives to create jobs, to invest and to increase production. If no free capacity in the economy exists and price levels fully adjust to higher public demand, increase in general government expenditure will extensively crowd out value added generated by the private sector. It should also be noted that higher public expenditure must be financed with borrowing, (future) tax increases or spending cuts. Financing public spending with borrowing may increase interest rates in the financial markets, which will reduce private consumption and investments. The positive impacts of fiscal policy may also remain smaller than expected if the private sector anticipates the tightening of fiscal policy.

In practice, estimating the indirect impacts of fiscal policy is difficult. Economists have noted that the effectiveness of fiscal policy depends on a wide range of different factors, such as structures of the economy, cyclical factors, financing of public expenditure or the type of public spending. In other words, fiscal multiplier is not fixed and its size depends on a variety of different factors.

Estimates of the size of fiscal multiplier

There is an extensive economics research literature analysing the macroeconomic impacts of general government expenditure (measuring the joint impacts of direct and indirect mechanisms; see for example, Ramey, 2019). Even though there is no agreement in the research literature on the mechanisms behind fiscal policy, the estimates of the size of the fiscal multiplier are surprisingly similar. According to Ramey (2019), in international research, the size of the fiscal multiplier for public spending is typically set between 0.6 and 1. The estimates of the fiscal multiplier based on Finnish data are close to one and the research results are in line with international research literature.

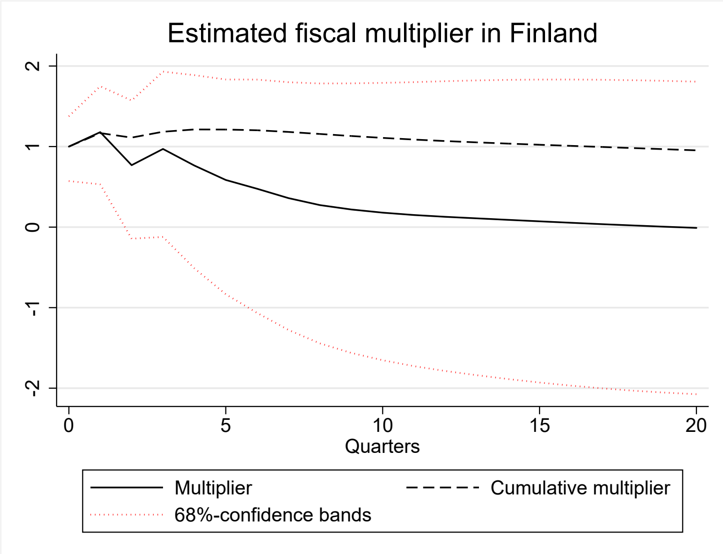
In recent years, in addition to assessing the macroeconomic impacts of public spending, economistshave also studied the regional impacts of fiscal policy (see for example, Chodorow-Reich 2019). Even though the regional fiscal multiplier cannot be directly generalised as a macroeconomic public spending multiplier, it offers important information on regional impacts of public expenditure.[1] Most estimates of the regional fiscal multiplier vary between 1 and 2. According to Räsänen and Mäkelä (2021), the regional fiscal multiplier in Finland is slightly above one.

In research literature, the fiscal multiplier is approached from a theoretical or empirical perspective. The theoretical approach is often based on dynamic stochastic general equilibrium (DSGE) models in which the behaviour of economic actors is quantitatively modelled with maximum accuracy.[2] In the empirical approach, empirical data is extensively used so that there are no

1 According to Chodorow-Reich (2019), regional fiscal multiplier provides the lower limit to the macroeconomicmultiplier in a closed economy, if a passive monetary policy is pursued and if the increases in public expenditure are financed by increasing general government deficit

2 In the models used in policymaking (such as the KOOMA model applied by the Ministry of Finance), the economy is modelled in great detail and thus, both the substitution effect and demand-based mechanisms are taken into account.

presumptions of economic mechanisms. Typically, empirical research makes use of structural vector autoregressive (SVAR) models.[3]



The chart above shows an estimate of fiscal multiplier in different time periods. The multiplier (solid line) has been determined on the basis of the empirical VAR model using the identification method of Blanchard and Perotti (2002). The chart also shows the cumulative multiplier (dashed line) (Mountford and Uhlig 2009), which describes total GDP growth in relation to general government spending in different time periods. When the time period becomes longer, the multiplier decreases. However, the confidence set describing the estimation uncertainty is wide, and the multiplier is not lower or higher than 1 in terms of statistical significance. Considering both the estimates presented in literature and the result shown in the chart above, it can be concluded that fiscal multiplier is close to one. This means that fiscal policy can to some extent stimulate the economy.

3 Both theoretical and empirical studies provide similar estimates of fiscal multiplier.

Literature

Blanchard, O. ja Perotti, R. (2002), "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output", Quarterly Journal of Economics 117(4): 1329–68.

Mountford, A. ja Uhlig, H. (2009), "What Are the Effects of Fiscal Policy Shocks?", Journal of Applied Econometrics 24(6): 960–92.

Ramey, V. (2019), "Ten Years after the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research?", Journal of Economic Perspectives, 33 (2): 89-114.

Chodorow-Reich, G (2019), "Geographic cross-sectional fiscal spending multipliers: What have we learned". American Economic Journal: Economic Policy, 11(2): 1-34.

Räsänen, J. ja Mäkelä, E. (2021), "The effect of government spending on local economies during an economic downturn". European Economic Review, 134, 103697.

2.1.1 General government debt

Last year, the general government debt ratio grew by 10 percentage points and reached 69.5% of GDP. The debt totalled EUR 164.2 billion, an increase of EUR 21.2 billion from 2019. The debt ratio will still grow this year but the growth will slow down in 2022. However, in the years after that, the debt will start rising again and will reach 73.4% of GDP in the middle of the decade.

Central government accounted for most of the increase in 2020. On-budget debt totalled EUR 124.8 billion, an increase of EUR 18.5 billion from 2019. Local government debt increased by EUR 1.9 billion, even though the budgetary position of the sector remained in balance. The debt of the social security funds increased by EUR 2.2 billion due to the debts accumulated by the Employment Fund and the increase in liabilities related to the derivatives of employment pension institutions.

In 2020, borrowing by central and local government was substantially higher than the deficit, which has boosted their cash reserves. Central government cash reserves are expected to shrink in 2021 as deferrable appropriations budgeted for last year will be used this year. Local government debt is expected to match the sector's financial deficit.

In addition to on-budget debt, a number of other items are also included in general government debt. For example, central government debt includes the debts of a number of off-budget units and companies as well as the collateral on the derivative contracts used in the management of the central government debt portfolio. Local government debt also includes the debt of many municipality-owned companies. The debt of the social security funds comprises the debts of the Employment Fund and the cash collateral on the derivatives of employment pension institutions.

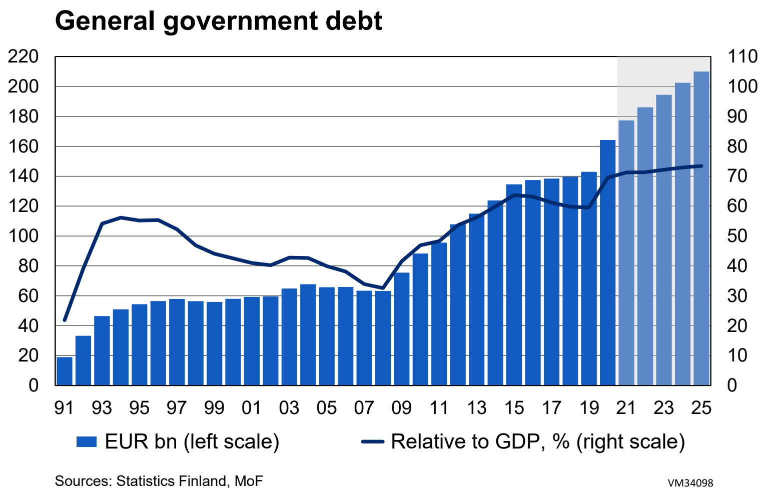
Factors impacting changes in the debt ratio are specified in Table 17. In the next few years, the debt ratio will be boosted by a high primary deficit in central and local government finances, which will slowly narrow. At the same time, economic growth will narrow the debt ratio but it, too, will have less impact in the coming years.

Other factors describe the expenditure and revenue that do not impact the deficit recognised in the national accounts. In 2020, the debt ratio increased more than what would have been required to cover the deficit. Borrowing will also be reduced by government plans to finance one-off expenditure increases by selling shares in 2021–2022 and tax timing adjustments. At the same time, from 2021 onwards, preparations for funding the fighter aircraft project will increase borrowing needs. This project is not yet included in the deficit recognised in the national accounts

Table 17. Change in general government debt ratio and related factors

	2019	2020	2021**	2022**	2023**	2024**	2025**
Debt ratio, relative to GDP, %	59.5	69.5	71.2	71.3	72.2	72.9	73.4
Change in debt ratio	-0.2	10.0	1.7	0.1	0.8	0.7	0.5
Factors impacting change in debt ratio							
Primary budgetary position (excluding employment pension funds)	1.3	4.9	4.2	3.0	2.1	2.0	2.0
Interest expenditure	0.8	0.7	0.5	0.4	0.3	0.3	0.2
Other factors[1]	-0.7	3.4	0.6	-0.0	0.6	0.6	0.5
Change in GDP	-1.7	1.0	-3.5	-3.3	-2.3	-2.2	-2.1
Surplus of employment pension funds	1.1	0.2	0.8	0.9	1.0	1.0	1.0

[1] Includes privatization proceeds, lending and factors related to the valuation and timing of revenue and expenditure.
Plus indicates increasing effect on debt ratio, minus a lowering effect on debt ratio."



2.2 Central government

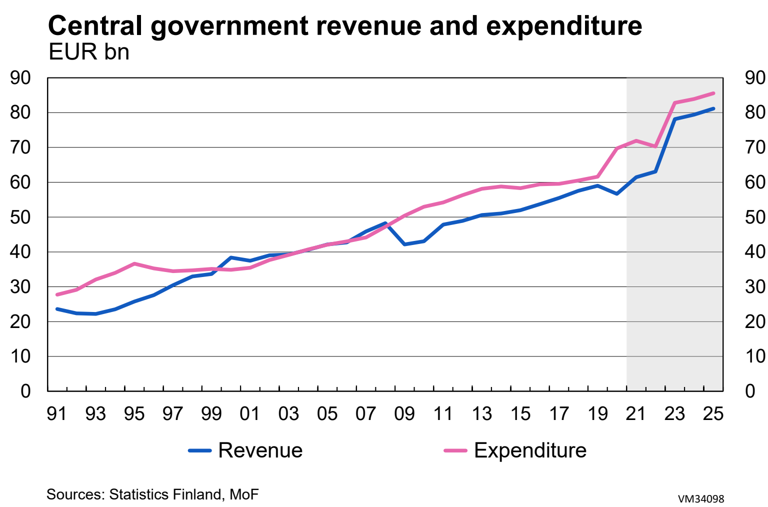
Last year, there was a sharp deterioration in central government budgetary position as a result of the COVID-19 epidemic. According to preliminary national accounts, the budgetary position in 2020 was EUR 13.1 billion in deficit (5.5% of GDP). The sharp contraction of the Finnish economy in spring 2020 has weakened central government finances as the automatic stabilisers have led to higher expenditure and lower revenue. Discretionary spending increases have also substantially weakened the central government budgetary position.

Despite the economic recovery, central government budgetary position is estimated to be almost EUR 10,4 billion (4.2% of GDP) in deficit this year. The active fiscal policy pursued by the Government has boosted discretionary spending. Last year, Prime Minister Marin's Government presented seven supplementary budgets to Parliament. The supplementary budgets have granted support for local government and funding for new infrastructure projects, some of which will start this year. New discretionary measures introduced in 2021 include capital transfers, additional purchases of COVID-19 vaccines and subsidies for cargo and passenger shipping companies. The Recovery and Resilience Facility of the EU (RRF) will also increase expenditure, especially in 2022 and 2023. RRF spending will be channelled to investment grants, subsidies, public consumption and public investments. Finland will have to pay its RRF funding contribution between 2028 and 2058.

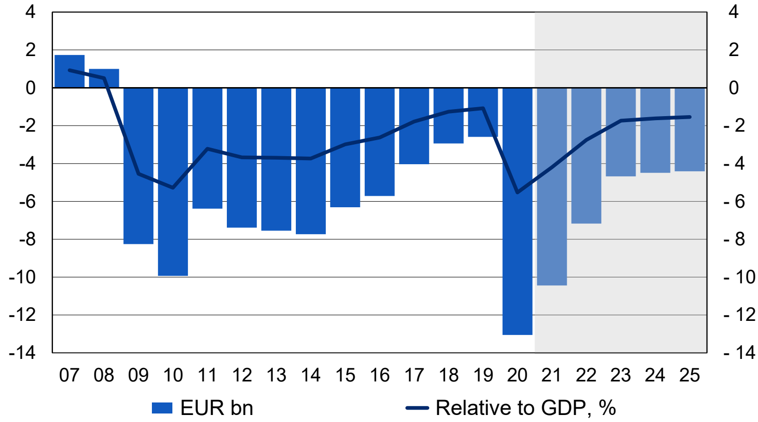
Despite higher expenditure, the central government budgetary position will improve this year due to increases in tax revenue. As the economy recovers and employment increases, the direct central government tax revenue will increase by almost 17% from last year. The growth in household purchasing power and the reduction in the savings rate are also reflected in the rapid growth of indirect tax revenue.

Next year, central government deficit will decrease even more rapidly than this year. The substantial decline in expenditure is mainly due to a sharp fall in the spending increases prompted by the COVID-19 epidemic, such as the cost support for companies, and purchases of vaccines, protective equipment and instruments required for the epidemic. Despite improvements, central government budgetary position will remain more than EUR 7 billion in deficit.

Further reductions in the deficit are expected between 2023 and 2025. The level of investments has been exceptionally high in recent years, but in 2023 a reduction is expected as transport infrastructure investments decrease. Purchases by the Finnish Defence Forces are scheduled for the year 2025, which will significantly increase investments. Despite a shrinking deficit, the central government budgetary position will probably be weaker at the end of the outlook period than before the COVID-19 epidemic.

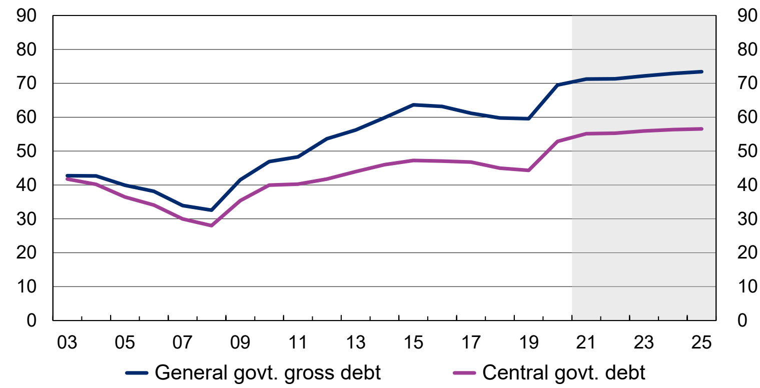


Central government financial balance



Sources: Statistics Finland, MoF VM34098

General government debt
relative to GDP, %



Sources: Statistics Finland, MoF VM34098

Table 18. Central government[1]

	2018	2019	2020	2021**	2022**	2023**
	EUR billion					
Current taxes	14.9	15.2	13.3	15.6	15.8	30.2
Taxes on production and imports	33.0	33.6	33.1	35.4	36.1	36.8
Social security contributions	0.0	0.0	0.0	0.0	0.0	0.0
Taxes and social security contributions, total[2]	48.6	49.6	47.2	51.8	52.8	67.9
Other revenue[3]	9.1	9.5	9.4	9.2	9.8	9.8
of which interest receipts	0.3	0.2	0.1	0.1	0.2	0.2
Total revenue	**57.8**	**59.1**	**56.7**	**61.1**	**62.7**	**77.7**
Consumption expenditure	14.0	14.4	15.1	16.3	16.4	16.5
Subsidies and current transfers, total	40.0	40.6	47.7	47.2	46.2	58.9
to general government	28.2	28.7	33.2	32.7	33.1	45.8
Interest expenses	1.9	1.8	1.5	1.2	0.9	0.8
Capital expenditure[4]	4.7	4.9	5.4	6.9	6.4	6.1
Total expenditure	**60.7**	**61.7**	**69.7**	**71.5**	**69.8**	**82.3**
Net lending (+) / net borrowing (-)	-2.9	-2.6	-13.1	-10.4	-7.2	-4.7
Primary balance[5]	-1.0	-0.8	-11.5	-9.2	-6.3	-3.9

[1] As calculated in the National Accounts
[2] Incl. capital taxes
[3] Incl. capital transfers (excl. capital taxes) and consumption of fixed capital
[4] Gross fixed capital formation and capital transfers
[5] Net lending excluding gross interest expenses

The 2022 budget and central government spending limits

The Budget proposal for 2022 is based on the General Government Fiscal Plan of May 2021 and the Programme of Prime Minister Marin's Government. On-budget expenditure will total about EUR 64.8 billion in 2022. The expenditure will be about EUR 3.3 billion lower compared with the spending budgeted for 2021 (including the supplementary budgets I–III). Compared with the 2021 Budget, spending will be about EUR 0.5 billion lower.

The spending limits for 2022 amount to EUR 53.2 billion, of which about EUR 117 million will be set aside as an unallocated reserve after the 2022 Budget proposal. In the 2022 spending limits, a total of EUR 0.3 billion has also been set aside for supplementary budgets. Under the state of emergency mechanism set out in the spending limits based on the Government Programme and used in 2021 and 2022, a total of EUR 500 million can be allocated to one-off expenditure each year.

The Government decided on the spending limits for the parliamentary term (2020—2023) on 7 October 2019 as part of its first General Government Fiscal Plan. In its mid-term policy review in spring 2021, the Government decided to increase the spending limits for the years 2022 and 2023. The expenditure line will gradually descend towards the end of the parliamentary term and will continue on this path after the parliamentary term is over. The spending limits were increased by EUR 900 million for the year 2022 and by EUR 500 million for 2023. The need to increase the spending limits for 2023 was reduced by the fact that spending limits expenditure amounting to EUR 370 million will be permanently reallocated from 2023.

The expenditure that varies according to the economic cycle and automatic fiscal stabilisers, such as unemployment security expenditure, pay security, housing allowances and basic social assistance, remain outside the spending limits. However, expenditure effects generated by changes in the criteria for these items are included within the spending limits. Debt interest payments, value added tax expenditure, financial investment expenditure and expenditure corresponding to technically transmitted payments by central government are also excluded from the spending limits.

Because there has been no abatement of the coronavirus situation, all COVID 19-related direct costs will be outside the spending limits in 2021—2023. They include the expenditure arising from testing and higher testing capacity, tracing, quarantines, treatment of patients, travel-related health security and vaccines. Expenditure outside the spending limits will total about EUR 12 billion in 2022.

The expenditure of individual administrative branches compared to the 2021 Budget will primarily be reduced by a decrease in spending on COVID-19-related health security (- EUR 1.7 billion), financial investments (- EUR 0.6 billion) and other expenditure outside the spending limits (- EUR 2 billion).

Similarly, the spending limits expenditure totals about EUR 52.8 billion, which is EUR 1.6 billion more than in the Budget for 2021. About EUR 0.9 billion of the 2023 funding for wellbeing services counties will already be paid in December 2022, which is the main reason for the higher expenditure. Expenditure in 2022 will also be increased by statutory and contractual index increases (EUR 0.6 billion), the change costs resulting from the health, social services and rescue services reform (EUR 0.2 billion) and increase in the payments to the European Union (EUR 0.2 billion).

In 2022, on-budget revenue (excluding borrowing) is estimated to be about EUR 57.9 billion, with tax revenue accounting for about EUR 48.7 billion of the total. On-budget tax revenue will increase by 8.1 % from what was budgeted for 2021 (including the supplementary budgets I–III). Other on-budget revenue will increase by 5.5%.

In addition to brisk economic growth, other factors, such as an increase in the state’s share of corporation tax revenue (after the expiry of a temporary increase in municipalities’ share of the tax) are also contributing to the sharp increase in central government tax revenue. This will boost central government tax revenue by almost EUR 0.5 billion, compared to the previous year. In 2022, tax revenue will also be increased by the end of the easing of tax payment terms, as a result of which about EUR 0.3 billion in tax revenue will be carried over from previous years.

Tax criteria changes set out in the Budget proposal lowering taxation will reduce the accumulated cash balance by about EUR 455 million in 2022. The index adjustment made in the earned income tax criteria is the most important of the reductions. The domestic help credit for domestic work, care and nursing, and for phasing out oil heating will be temporarily increased. Taxation of fully electric cars will be reduced. At the same time, there will also be changes in criteria raising taxes that will boost tax revenue by more than EUR 115 million in 2022. In accordance with the Government Programme, these measures include increases in the taxes on tobacco products. Next year’s Budget will also contain changes to the energy tax criteria, such as the lowering of the tax subsidy for paraffinic diesel. Changes in the transfer pricing adjustment provision are expected to boost corporation tax revenue by EUR 40 million in 2022.

Based on the updated macroeconomic forecast and accrual data, on-budget tax revenue is expected to be about EUR 1.4 billion higher in 2022 than what was forecast in the General Government Fiscal Plan in spring. Economic recovery has been stronger than expected. The economic recovery is mainly reflected in the accumulation of revenue of the most cyclically sensitive taxes, such as corporation tax and tax on capital gains. An exceptionally easy monetary policy has boosted asset values, which is expected to be reflected in the revenue of capital gains taxes. In fact, the revenue estimate of taxes on earned income and capital gains has been increased based on the accrual data for last year and a more positive employment trend, compared with the General Government Fiscal Plan.

A total of EUR 636 million for the investments paid from the Recovery and Resilience Facility (RRF) of the EU will be budgeted for 2022. At the same time, a total of EUR 355 million in revenue is expected from RRF in 2022. The payments are based on the progress in national plans and will be carried out when it has been checked that the objectives set out in the plans have been implemented as described in them.

The Budget proposal is about EUR 6.9 billion in deficit, which will be covered with additional borrowing. Central government debt is estimated to total about EUR 146 billion at the end of 2022. The on-budget deficit has decreased by about EUR 0.7 billion compared to the General Government Fiscal Plan presented in spring 2021. Because of the factors discussed above, the revenue forecast is EUR 1.7 billion higher than what was anticipated in spring. On-budget expenditure is about EUR 1.0 billion higher than what was estimated in the spring 2021 General Government Fiscal Plan.

Factors affecting changes in on-budget balance compared with the General Government Fiscal Plan of spring 2021, EUR billion

	2022
Estimated balance, General Government Fiscal Plan of May 2021	**-7.6**
Revision of expenditure estimate	**-1.0**
Expenditure related to the use of the EU Recovery and Resilience Facility	-0.1
Contributions to the European Union	-0.1
Reserves	0.1
Change in the timing of health and social services funding	-0.9
Other changes in expenditure (net), including more accurate index adjustments	0.0
Revision of revenue estimate	**1.7**
New tax criteria changes (net)	0,0
Revenue from the EU Recovery and Resilience Facility	0.1
Changes to estimates of miscellaneous revenue and revenue from interest, dividends and sales of shares	0.3
Tax payment arrangements (postponement of payments)	0.0
Other factors affecting projected revenue (including accrual data and new economic forecast)	1.3
Total change	**0.7**
Balance projection, Budget proposal 2022	**-6.9**

Table 19. Forecasts for certain revenue and demand items impacting taxable income and the tax base

	2021	2022**	2023**	2024**	2025/2021**
	change, % per year				annual change, %
Taxable earned income and capital income	4.6	3.3	2.9	2.9	3.3
Wage and salary earnings and other income	4.5	4.5	3.1	2.9	3.6
Pensions and other social security benefits	1.5	0.8	2.7	3.1	2.2
Capital income	16.2	3.1	2.7	2.6	5.4
Index of wage and salary earnings	2.3	3.0	2.5	2.6	2.6
Operating surplus	5.5	4.5	4.2	3.8	3.6
Value of household taxable consumption expenditure	4.4	3.9	2.7	3.2	3.3
VAT base	6.8	3.5	2.4	2.6	2.9
Petrol consumption	0.1	0.8	-2.2	-2.3	-1.2
Diesel consumption	-5.7	2.1	-1.6	-1.9	-1.9
Electricity consumption	5.1	1.3	0.7	0.5	1.7
Duty-paid alcohol consumption	-5.7	2.1	-1.6	-1.9	-1.9
New passenger cars	103000	110000	113000	115000	111400
Consumer price index	1.8	1.6	1.7	1.8	1.8

Table 20. Impact of change in selected tax base items on tax revenue

Tax category	Tax base	Change	Change in tax revenue, EUR million
Taxes on earned income	Wage and salary earnings	1%	470, of which central govt. 139 and local govt. 221
	Pension incomes	1%	146, of which central govt. 38 and local govt. 94
Capital income tax	Investment income	1%	47
Corporate tax	Operating surplus	1%	55, of which central govt. 36 and local govt. 19
VAT	Value of private consumption	1%	133
Car tax	Sales of new cars	thousands	4
Energy tax	Electricity consumption[1]	1%	9
	Petrol consumption	1%	13
	Diesel consumption	1%	15
Duty on alcoholic beverages	Alcohol consumption	1%	15
Duty on cigarettes	Cigarette consumption	1%	10

[1] Excl. manufacturing industries, datacenters and greenhouses

Table 21. Central government on-budget revenue

	2020	2021**	2022**	2023**	2024**	2025**	2025/2021**
	provisional financial accounts	budget incl. supplementary budget					annual change, %
	EUR billion						
Total tax revenue estimates	42.4	45.3	48.7	62.0	64.4	66.2	9.6
Income and wealth taxes	12.9	14.1	15.6	28.7	30.6	31.8	22.8
Taxes based on turnover	19.2	21.2	22.6	22.9	23.4	24.1	4.7
Excise duties	7.2	6.9	7.5	7.5	7.4	7.3	0.3
Other taxes	3.0	3.0	3.0	2.9	3.0	3.0	-0.4
Miscellaneous revenue	5.7	5.8	6.3	6.2	6.1	6.1	1.2
Interest income and profit entered as income	1.3	2.7	2.7	1.7	1.3	1.3	8.3
Total revenue estimates	49.6	53.9	57.9	70.1	72.0	73.7	8.4

Table 22. Impact of discretionary tax measures on general government tax revenue

	2020	2021	2022**	2023**	2024**	2025**
	EUR million					
Earned income taxes	-569	-434	-459	-744	-488	-475
Average increase in municipal tax rate	80	60	0	0	0	0
Investment income tax	26	26	0	13	13	0
Corporate tax	-91	-100	33	62	56	35
Other direct taxes	2	-108	-107	-9	25	0
Value-added tax	-34	33	-13	0	0	0
Energy taxes	82	96	178	63	24	8
Other indirect taxes	37	93	62	61	45	0
Social security contributions	-818	1637	-224	270	117	13

On-budget accounts and national accounts

On-budget entities showed a deficit of EUR 17.4 billion in 2020. According to the preliminary national accounts, central government deficit totalled EUR 13.1 billion, a reduction of EUR 4.3 billion. No direct conclusions on the central government budgetary position recognised in the national accounts can be made on the basis of the on-budget budgetary position.

The substantial difference in 2020 is mainly explained by an increase in deferrable appropriations, which are entered in the on-budget deficit in the budget year, but in the national accounts only when the money is spent. The total of deferrable appropriations carried over to following years was about EUR 3.6 billion higher in 2020 than in 2019.

This year, budget balance is weaker than the budgetary position recognised in the national accounts. However, there are many differences affecting these developments in a number of different ways. The deferrable appropriations carried over from 2020 will be used this year, which will increase the deficit recognised in the national accounts. At the same time, the deficit recognised in the national accounts is not yet increased by the funding of the fighter project, which will have an impact on on-budget spending. Changes in the payment schedule for certain tax types will increase the budget deficit in 2021.

In 2022, the budgetary balance will be close to the budgetary position recognised in the national accounts. In 2022, on-budget balance will be weakened by an advance payment of EUR 0.9 billion to the wellbeing services counties. The assumption is that in 2023, the transfer will translate into a transfer between central government and the wellbeing services counties in the budgetary position recognised in the national accounts. The budget deficit will be reduced by planned share sales between 2021 and 2023, which will not affect the deficit recognised in the national accounts.

Between 2023 and 2025, the deficit recognised in the national accounts will be lower than in the budget. This is due to the preparations for the funding of the fighter aircraft project, which will increase the budget deficit, and the tax revenue timing adjustments related to the health and social services reform.

It is not always possible to make conclusions about the central government borrowing requirement on the basis of the on-budget deficit. In 2020, central government borrowed an additional EUR 18.5 billion. On the basis of the deficit, central government should have borrowed a total of EUR 17.4 billion, which means that the borrowing was about EUR 0.9 billion more than the budget deficit would have required and EUR 5.1 billion more than the deficit recognised in the national accounts would have required. There are a number of reasons for this difference. Last year, borrowing was boosted by preparations for COVID-19-related expenditure, which also led to an increase in central government cash reserves.

There are several reasons for the difference between the on-budget budgetary position and the central government budgetary position recognised in the national accounts. The most important of them is that in the national accounts, the central government sector is larger than on-budget entities, which basically comprise central government agencies. In the national accounts, the central government sector comprises on-budget entities, government funds (except for the State Pension Fund), universities and their real estate companies as well as the Senate Properties. The decisions on the categorisation of public sector units are regularly reviewed. All central government and general government units are listed on the website of Statistics Finland.

In addition to the classification, differences also arise because the criteria for recognising expenditure in the national accounts and in on-budget entities differ from each other. The national accounts are accrual-based whereas the on-budget entities are partially cash-based. Because of the differences in recognition criteria, deferrable appropriations in particular cause a difference between on-budget and national accounts expenditure. Deferrable appropriations are multi-year appropriations that are entered in the Budget for one year only. In the national accounts, deferrable appropriations are recognised on accrual basis in accordance with their year of use (as all other expenditure). There can be substantial variation in the net effect of deferrable appropriations from one year to another. In the national accounts, taxes, subsidies and EU contributions are converted into accrual-based items by means of timing adjustments. The difference arising from the timing adjustments can only be determined afterwards.

Such financial investments as loans granted and repaid by the state and sales and acquisitions of shares that in the national accounts are primarily treated as financial transactions are also included as revenue and expenditure in the on-budget budgetary position. Financial transactions do not have any effect on the central government budgetary position recognised in the national accounts. The financial transactions also include the derivatives, using which the State Treasury has achieved significant reductions in on-budget interest payments. The fact that derivative contracts reduce interest payments is not considered in the national accounts, which means that the interest expenditure recognised in the national accounts is substantially higher than the on-budget interest payments.

EU Member States report to Eurostat twice a year on the differences between the figures in on-budget entities and the national accounts as part of their deficit and debt reporting. Detailed explanations should be given for the differences between the final accounts budgetary position for central government and other general government subsectors and national accounts net lending in the preceding years. Debt dynamics (the uniformity of the change in general government net lending and public debt) must also be detailed in the reporting.

Table 23. On-budget balance and central government net lending[1]

	2019	2020	2021**	2022**	2023**
	EUR billion				
On-budget surplus (+) / deficit (-)[2]	-2.0	-17.4	-12.3	-6.9	-6.4
Privatization proceeds (net proceeds from equity sales)	-0.1	0.5	0.1	-1.2	-0.3
Financial investment, net	-0.4	-0.4	-0.0	0.1	0.1
Revenue surplus in off-budget units	-0.5	-0.2	-0.2	-0.2	-0.2
Cash / accrual basis adjustment	0.1	0.5	2.8	2.2	1.9
Other adjustment items[3]	0.4	4.0	-1.3	-1.0	0.1
Central government net lending (+) / borrowing (-)	-2.6	-13.1	-10.4	-7.2	-4.7

[1] In National Accounts terms.

[2] Incl. government debt servicing.

[3] Incl. debt cancellations, profit on reinvested foreign direct investments, impact of the difference in the recording of deferrable budgetary appropriations, superdividends

2.3 Local government

According to national accounts, the local government budgetary position was in balance in 2020 and improved by a record amount of EUR 3 billion from the previous year. The improvement was the result of the massive support measures prompted by the COVID-19 epidemic.

In 2021, local government budgetary position will decline and turn into a deficit of about EUR 1.1 billion despite the economic recovery and central government support measures. This is caused by a more rapid growth in consumption expenditure resulting from the increase in expenditure on protective equipment and COVID-19 virus testing, changes in the tasks envisaged in the Government Programme and local government pay rises. A service and care backlog has also accumulated during 2020 and 2021 and reducing the backlog will cause additional expenditure pressures. It is not yet possible to fully estimate the amount of this backlog. The projection includes the Recovery and Resilience Facility funding intended to reduce the care, rehabilitation and service backlog, and the corresponding costs for 2021 and 2022. The Government has pledged to finance all new and expanding local government tasks and compensate the municipalities for costs directly linked to COVID-19.

The economic projection of local government finances for 2022–2025 is a pressure calculation that, in addition to general economic and population trends, only takes into account the measures impacting local government finances that are already included in the Budget proposals and the General Government Fiscal Plan. The projection does not include municipalities' and joint municipal authorities' own measures for the period 2022–2025. They will only be included in the projection after the budgets have been finalised. Municipal tax rates have been kept at 2021 levels. The pressure calculation takes into account the Government proposal to reform health and social services and rescue services approved by Parliament, which will transfer the responsibility for these tasks from municipalities to wellbeing services counties in 2023. The temporary administration of the wellbeing services counties is included in the local government projection until the end of 2022.

Even though the increase in local government expenditure will slow down in 2022 as the COVID-19 crisis eases, local government budgetary position will deteriorate sharply as the temporary support measures end or their impact is reduced. One-off subsidies prompted by the COVID-19 crisis do not solve the structural imbalance between revenue and expenditure in local government finances, a result of health and social services expenditure pressures arising from an ageing population and a decline in working-age population. Growth in consumption expenditure will also be sustained by the new tasks introduced by the Government, reduction of the care and service backlog and price rises. At the same time, however, the health and social services reform may encourage municipalities to curb the rise in health and social services spending.

Local government collective agreements will expire at the end of February 2022. Personnel expenses are the largest cost item in local government and for this reason, pay agreements in the municipal sector have a significant impact on cost trends in the sector. In the pressure calculation, trends in local government earnings are expected to reflect the projected earnings trends at national level between 2022 and 2025. The tightness of the labour market is already visible in the municipal sector, as according to the employment outlook by occupation of the Ministry of Economic Affairs and Employment, there is a particularly severe shortage of health and social services professionals but there have also been difficulties recruiting kindergarten teachers.

In 2023, the responsibility for health and social services and rescue services will be transferred to wellbeing services counties and the funding for them will become a central government responsibility. Local government revenue and expenditure will be almost halved as a result of the reform. The health and social services reform will ease the cost pressures in local government arising from the growing need for care services for the ageing population. After the reform, local government will increasingly focus on services for young age groups, such as early childhood education and care, other education and training, the need for which will decrease due to a declining birth rate in the 2010s. The impact of the decrease in the need for services has been slightly softened in the projection, as the capacity to adapt service production rapidly varies in different municipalities.

Local government investments have grown for the past 15 years, and the growth has been particularly rapid in recent years. A total of EUR 1.2 billion in investments will be transferred from local government to the wellbeing services counties. Although the fastest growth phase of investments is estimated to be behind us, it is assumed that investments will remain at a high level throughout the outlook period. The investment pressures will remain substantial because of the age of the building stock and migration.

The structural imbalance of local government revenue and expenditure means that local government will accumulate additional debts until 2023. With the health and social services reform, about EUR 4.6 billion in debts will be transferred from local government to wellbeing services counties in 2023. According to pressure projections, local government deficits will persist after the introduction of the health and social services reform but the deficit will settle at 0.6% of GDP in 2024 and 2025. This is also reflected in slower growth of local government debt ratio.

Table 24. Local government[1]

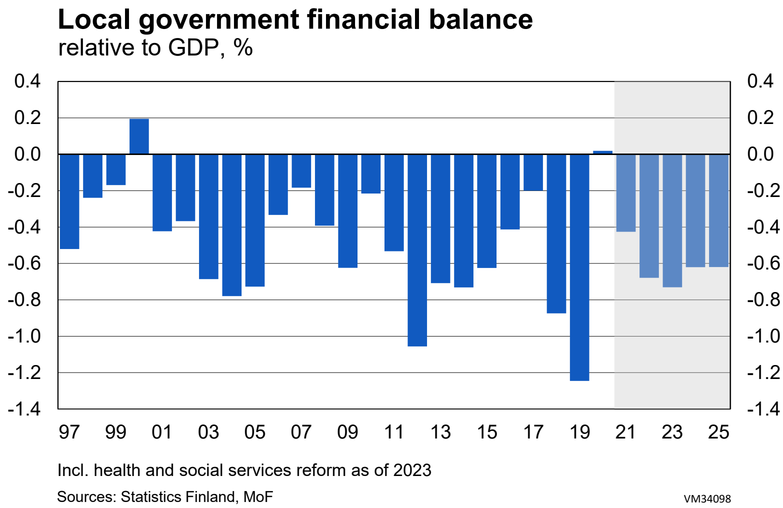
	2018	2019	2020	2021**	2022**	2023**
	EUR billion					
Taxes and social security contributions	22.5	23.2	24.5	25.3	25.5	12.3
of which municipal tax	18.8	19.4	20.5	20.7	21.5	8.8
corporate tax	1.9	1.9	2.1	2.7	1.9	1.4
real estate tax	1.8	1.9	2.0	2.0	2.0	2.1
Other revenue[2]	19.4	20.0	23.5	23.9	24.6	13.2
of which interest receipts	0.3	0.3	0.2	0.2	0.2	0.2
transfers from central government	14.2	14.4	17.7	17.8	18.3	7.3
Total revenue	**41.8**	**43.2**	**48.0**	**49.2**	**50.0**	**25.5**
Consumption expenditure	35.8	37.5	38.8	40.7	42.1	19.7
of which compensation of employees	21.4	22.1	22.4	23.2	24.1	12.5
Income transfers	2.4	2.5	2.6	2.7	2.8	2.1
of which social security benefits and allowances	0.7	0.8	0.8	0.8	0.9	0.2
subsidies and other transfers	1.6	1.6	1.8	1.8	1.8	1.7
interest expenses	0.1	0.1	0.1	0.1	0.1	0.1
Capital expenditure[3]	5.6	6.2	6.6	6.8	6.9	5.8
Total expenditure	**43.9**	**46.2**	**48.0**	**50.3**	**51.8**	**27.5**
Net lending (+) / net borrowing (-)	-2.0	-3.0	0.0	-1.1	-1.8	-2.0
Primary balance[4]	-1.9	-2.9	0.1	-1.0	-1.7	-1.8

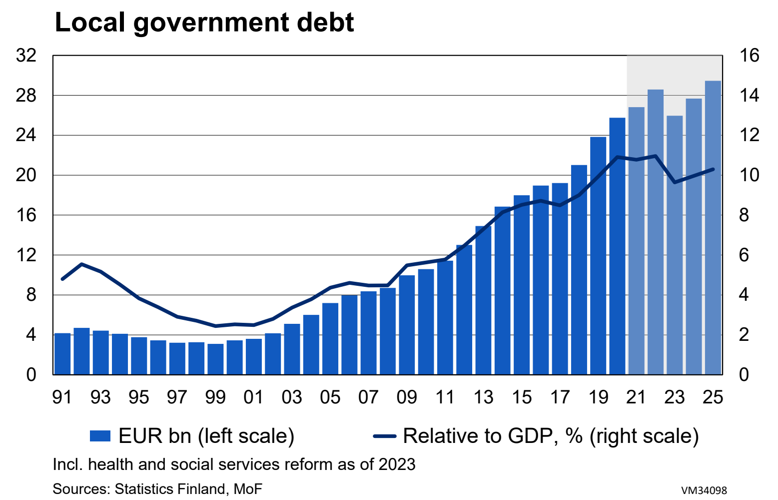
[1] As calculated in the National Accounts

[2] Incl. capital transfers and consumption of fixed capital

[3] Gross capital formation and capital transfers

[4] Net lending excluding gross interest expenses





2.4 Wellbeing services counties

On 23 June 2021, the Parliament adopted the Government's proposal for establishing wellbeing services counties and reorganising health, social and rescue services. The reform legislation will come into effect in stages. The actual responsibility for organising health, social and rescue services will be transferred from the municipalities to the wellbeing services counties on 1 January 2023.

In the projections for general government finances, the wellbeing services counties are treated as a separate local government sub-sector from 2023 onwards. In the projections, the wellbeing services counties comprise the activities of the wellbeing services counties (established as part of the health and social services reform), the HUS Group and the health and social services tasks of the City of Helsinki.

Initially, the wellbeing services counties will be running a slight deficit (about 0.2% of GDP). The deficit is due to the high level of investments in health and social services.

Most of the funding for the wellbeing services counties will come from the central government. In the two first years of operations, central government funding will be provided on the following basis: increase in the need for service and additional 0.2 percentage points in accordance with the county-specific price index and changes in mandatory tasks. The wellbeing services counties will also receive a small amount of income in the form of payments for services. In 2023, the sector will receive EUR 26.4 billion in revenue, 90% of which will come from central government.

Projected expenditures of the wellbeing services counties are based on increases in the need for service and anticipated changes in prices. Investment estimates are based on the financial plans of hospital districts. The cost of providing health and social services accounts for most of the expenditure of the wellbeing services counties. Personnel expenses or costs of purchasing goods and services will account for EUR 25.2 billion of total expenditure in 2023.

Initially, the wellbeing services counties will also incur costs as they begin and organise their operations. In the projections it is assumed that the transformation costs incurring from ICT investments, administrative expenses and harmonisation of wages and salaries will be as estimated in the Government proposal for the health and social services reform, but the size of these costs is uncertain.

Table 25. Welfare services counties

	2023**
	EUR billion
Total revenue	26.4
Total expenditure	27.1
Net lending (+) / net borrowing (-)	-0.7
Debt	5.1

2.5 Social security funds

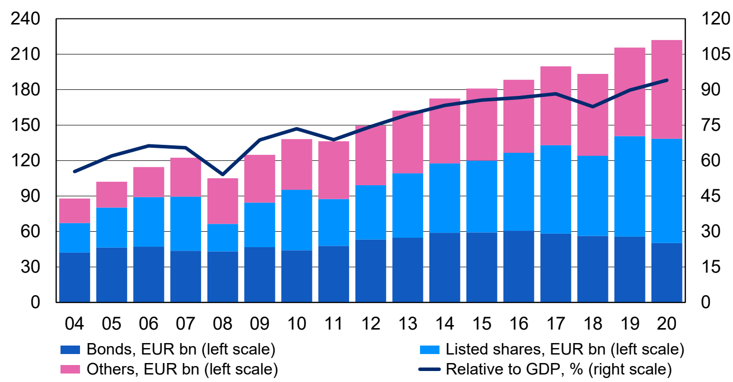
2.5.1 Employment pension schemes

Last year, the surplus of employment pension schemes fell to 0.2% of GDP, compared to 1.1% in 2019. The reason for the sharp decrease was a fall in the pension insurance contributions received, which was due to the temporary reduction in the private sector contribution (prompted by the COVID-19 pandemic) and a decrease in the wage bill. There was also a dramatic fall in the property income of the sector.

In 2021, the surplus of employment pension schemes will reach 0.8% of GDP as the pension contribution of private sector employers will be returned to its normal level. Moreover, with the economy recovering, the wage bill and property income have turned to growth. The reduction in the contribution for 2020 will be compensated with a temporary increase in the contribution between 2022 and 2025, which will strengthen the surplus in the sector. The surplus of pension insurance institutions will remain at around 1% of GDP between 2022 and 2025.

Property income received by employment pension schemes (interest and dividends) decreased by about 17% in 2020. Starting this year, property income will grow again but will only reach the 2019 levels in 2023. Employment pension assets totalled about EUR 241 billion at the end of June 2021.

Investment portfolio of pension funds
all members



Sources: The Finnish Pension Alliance TELA, Statistics Finland, MoF
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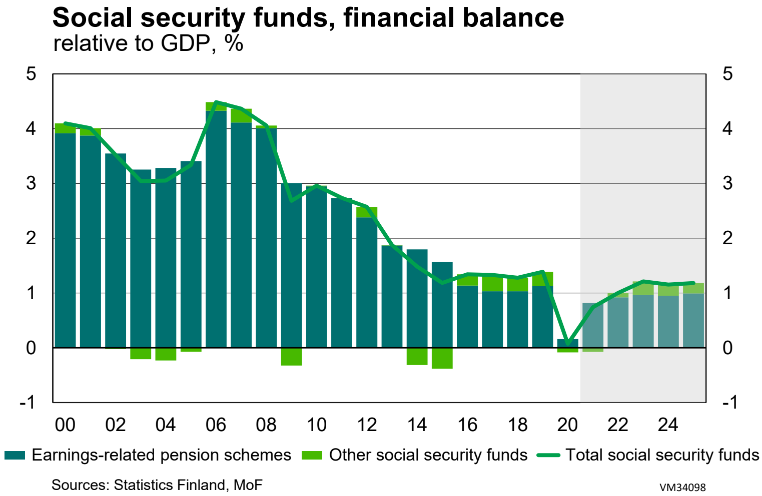


Table 26. Finances of social security funds[1]

	2018	2019	2020	2021**	2022**	2023**
	EUR billion					
Investment income	4.2	4.3	3.6	4.0	4.3	4.7
Social security contributions	27.9	28.5	27.6	30.5	31.6	32.9
of which contibutions paid by employers	17.6	17.8	16.7	18.8	19.8	20.5
contributions paid by insured	10.3	10.8	10.8	11.6	11.8	12.4
Transfer from general government	15.5	15.7	17.2	16.5	16.2	16.2
Other revenue	0.3	0.4	0.4	0.3	0.3	0.3
Total revenue	**47.9**	**48.9**	**48.7**	**51.3**	**52.5**	**54.1**
Consumption expenditure	3.7	3.8	3.8	4.0	4.1	4.1
Social security benefits and allowances	37.9	38.5	41.2	41.8	42.2	43.1
Other outlays	3.3	3.2	3.6	3.7	3.5	3.6
Total expenditure	**44.9**	**45.5**	**48.6**	**49.5**	**49.8**	**50.9**
Net lending (+) / net borrowing (-)	3.0	3.3	0.2	1.8	2.6	3.3
Earnings-related pension schemes	2.4	2.7	0.4	2.0	2.4	2.6
Other social security funds	0.6	0.6	-0.2	-0.2	0.2	0.7
Primary balance[2]	3.0	3.4	0.2	1.9	2.6	3.3

[1] As calculated in the National Accounts

[2] Net lending excluding gross interest expenses

2.5.2 Other social security funds

The other social security funds are the Social Insurance Institution of Finland, which is primarily responsible for basic security, and the Employment Fund, which is responsible for earnings-related unemployment security. Last year, the other social security funds had a deficit of 0.1% in relation to GDP. The weakening of their financial position was the result of a significant increase in unemployment and, in particular, lay-offs.

Other social security funds will remain slightly in deficit in 2021. Increases in unemployment insurance contributions in 2021 and 2022 will boost the sector's revenue. However, from 2021 onwards, central government will no longer provide funding for earnings-related benefits during lay-offs, which will reduce the revenue of other social security funds. Lay-off expenditure is estimated to be high this year but it will decline from 2022 onwards. The financial position of the sector will return to a slight surplus from 2022 onwards.

Table 27. Social security contributions rates and pension indices

	2018	2019	2020	2021	2022**	2023**
Social insurance contributions[1]						
Employers						
Sickness insurance	0.86	0.77	1.34	1.53	1.33	1.43
Unemployment insurance	1.91	1.50	1.26	1.43	1.51	1.51
Earnings-related pension insurance	17.75	17.35	15.22	16.95	17.35	17.35
Local government pension insurance	21.60	21.17	20.78	20.73	20.43	20.43
Employees						
Sickness insurance	1.53	1.54	1.86	2.04	1.66	1.80
Unemployment insurance	1.90	1.50	1.25	1.40	1.50	1.50
Earnings-related pension insurance	6.65	7.05	7.45	7.45	7.45	7.45
Benefit recipients						
Sickness insurance	1.53	1.61	1.65	1.65	1.46	1.51
Pension indices						
Earnings-related index (over 65)	2548	2585	2617	2631	2682	2728
National pension index	1617	1617	1633	1639	1669	1692

[1] Annual averages. The contributions of employers and the unemployment and employment pension contributions of beneficiaries as percentages of wages and salaries. The figures are weighted averages.

2.6 Long-term sustainability of general government finances

Ageing of the population has already increased pension expenditure over the past ten years and it is creating major pressures on the long-term sustainability of Finland's general government finances. An increase in the ageing population is the main factor boosting the health and long-term care expenditure in the coming decades, and the current total tax rate will be inadequate to finance these increases in the future. At the same time, the working-age population, which pays the taxes needed to finance the public services and social security, is shrinking.

There is a long-term imbalance (sustainability gap) between general government revenue and expenditure. The sustainability gap calculation shows how much general government finances should be consolidated in the near future in order to ensure that the finances are in balance in the long-term. In other words, after the adjustment, there would no longer be any need to increase the tax rate, cut spending, introduce structural reforms consolidating general government finances or increase general government debt. However, the sustainability gap calculation does not tell how the general government debt ratio should be stabilised or set the timetable for this process. Furthermore, the harmful impacts of the adjustment or positive impacts of structural reforms on economic growth are not taken into account.[1]

The purpose of the sustainability gap calculations is to estimate how the ageing of the population is impacting the outlook for general government finances in the coming decades. In addition to the ageing of the population, there are also many other pressures on general government finances, which arise from such issues as climate change and the need to overhaul and repair public infrastructure.

1 As the sustainability gap (S2 indicator) does not take into account the potential adverse effects of direct adjustment measures on economic growth, it should not be used as the sole instrument to assess the required adjustment. There are other methods in which more consideration is given to the negative growth impacts of direct adjustment measures. Technically, the results given by the S2 indicator correspond to a situation in which the fiscal policy coefficient would be zero (the adjustment measures do not slow down economic growth). It is generally assumed that direct adjustment measures will slow down economic growth. At the same time, however, many of the structural reforms do not have such adverse effects and they can also strengthen the basis for economic growth.

The Ministry of Finance estimates that the sustainability gap will be over 2.5% of GDP (some EUR 8 billion) at 2025 level. The estimated level of the sustainability gap has remained more or less unchanged since last spring. The findings can be interpreted so that the ageing of the population poses a significant challenge to the sustainability of general government finances. The general government debt ratio is also expected to increase in the next few years and exceed 70% by mid-2020s, which increases the risks to general government finances compared to the previous debt ratio of about 60%.

In the sustainability gap calculation, general government debt is not expected to settle at any specific level. Thus, the debt balance produced by the calculation may also be relatively high or low, depending on the level of the debt ratio at the time of the calculation and the estimated impact of the ageing of the population on public spending trends in the coming decades. For this reason, the debt sustainability of general government finances should also be examined in other ways. These methods include the reviews presented in the Ministry of Finance report on the sustainability of Finland's public finances.[2]

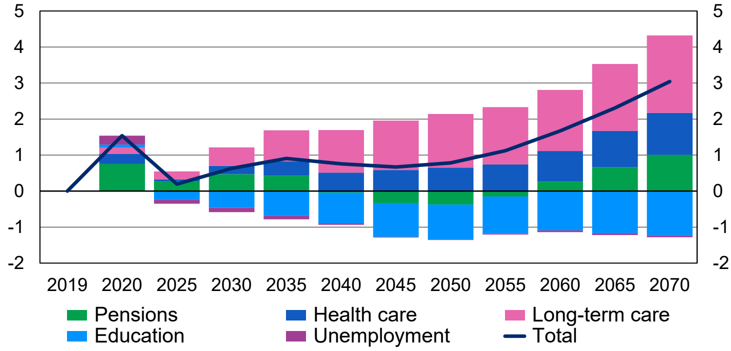
The Ministry of Finance estimate of the long-term sustainability of general government finances is based on the methods and calculation principles jointly agreed in the European Union Working Group on Ageing Populations and Sustainability (AWG). The sustainability gap calculation is a pressure calculation, not the most probable future scenario. The calculation is based on the assumption of unchanged policy, which means that it projects trends under current legislation and practices to the future with the help of population projections, spending decompositions by age groups, and estimates of long-term economic growth trends. Only the decisions whose impacts on general government finances can be estimated with sufficient accuracy are considered in the sustainability gap estimate. The methods used in the sustainability gap calculations are detailed on the Ministry of Finance website.[3]

2 https://julkaisut.valtioneuvosto.fi/handle/10024/162357 (in Finnish, with English abstract)

3 https://vm.fi/en/descriptions-of-methods

The aim is to use realistic assumptions as a basis for the sustainability gap estimate. As any indicator, the estimate changes slightly as the data and forecasts used are updated. The table below presents key calculation assumptions used in the sustainability gap calculation and examines the sensitivity of the calculation to changes in the assumptions. The results of these sensitivity assessments are presented in more detail in the last chapter of the description of sustainability gap calculation methods referred to above. The sustainability gap calculation and its sensitivity assessments provide a useful and logical way to analyse the size of the challenge arising from the ageing of the population and how this challenge can be addressed.

Change in age-related expenditure
from year 2019, relative to GDP, %



The figure is compiled using the model developed by the Ministry of Social Affairs and Health for social expenditure analysis

Source: MoF

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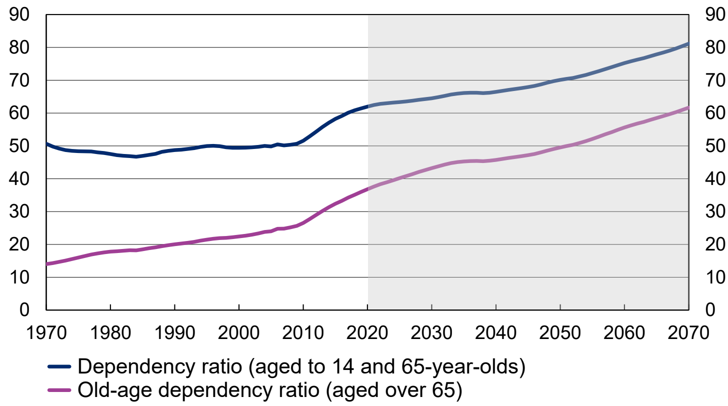
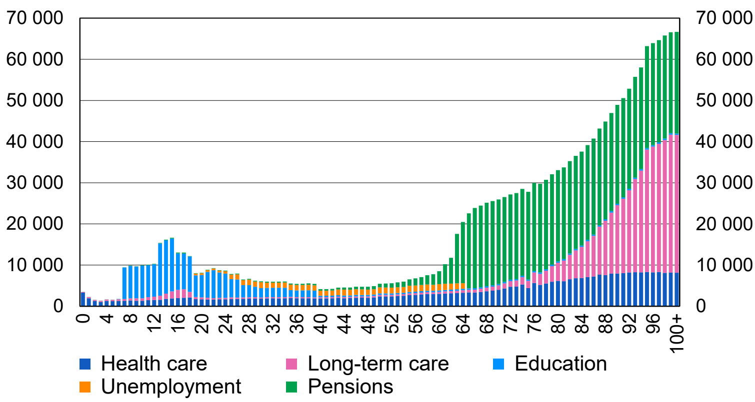
Dependency ratio
persons per hundred persons of working age



Sources: Statistics Finland, MoF

Age-related expenditure by age category in 2019
EUR per capita, average



Sources: SOME model developed by the Ministry of Social Affairs and Health, MoF

Table 29. Impact of various factors on the sustainability gap

<table>
<tr><th></th><th>Baseline scenario (autumn 2021)</th><th>Change</th><th>Impact on sustainability gap, pp.[1]</th></tr>
<tr><td>Growth in general productivity (and real earnings) in 2026-2070</td><td>on average 1.5%</td><td>+0.5 pp.</td><td>-0.3</td></tr>
<tr><td>Employment rate (15-64 yrs) in 2026-2070</td><td>74.5% in 2025 and 75.4% in 2070</td><td>+1.0 pp.</td><td>-0.3</td></tr>
<tr><td>Annual productivity growth of public health and social services in 2026-2070</td><td>0%</td><td>+0.5 pp.</td><td>-1.9</td></tr>
<tr><td>General government structural primary balance[2] / GDP in 2025</td><td>-1,0%</td><td>+1.0 pp.</td><td>-1.0</td></tr>
<tr><td>Total fertility rate</td><td>1.4</td><td>+0.35 (= 1.70)</td><td>-0.2</td></tr>
<tr><td>Annual net immigration (impact if employment rate remains unchanged)</td><td>15,000</td><td>+7,500 (= 22,500)</td><td>-0.4</td></tr>
<tr><td>Life expectancy at the age of 50 (33.6 years in 2019)</td><td>Will be increased by 7 years by 2070</td><td>-1.4 years (= 5.6 years)</td><td>-0.5</td></tr>
<tr><td rowspan="2">Postponement of the need for health and social services as life expectancy increases</td><td rowspan="2">Will be postponed by half of the life expectancy increase (people aged over 50)</td><td>Will be postponed at the rate of life expectancy increase</td><td>-1.1</td></tr>
<tr><td>No postponement as life expectancy increases</td><td>1.1</td></tr>
<tr><td>Inflation (change in GDP deflator and consumer prices) in 2026-2070</td><td>2%</td><td>-0.5 pp.</td><td>approx. 0.0</td></tr>
<tr><td>Real interest rate on central and local government debt (+ impact on the discount rates of the two sectors)</td><td rowspan="3">Real interest rate on central and local government debt and interest income 2%, real rate of return on central and local government's investments in shares 4% and real rate of return on employment pension schemes' investments 3.5% (from 2040s onwards)</td><td>-0.5 pp.</td><td>-0.2</td></tr>
<tr><td>Real interest rate on central and local government debt and impact on the real rate of return on central and local government and employment pension schemes' investments in bonds (+ impact on all sectors' discount rates)</td><td>-0.5 pp.</td><td>approx. 0.0</td></tr>
<tr><td>Real interest rate on central and local government debt and real rate of return on all general government investments (+ impact on all sectors' discount rates)</td><td>-0.5 pp.</td><td>0.6</td></tr>
</table>

[1] The calculations are based on summer 2020 MoF sustainability gap calculations (impact of assumption changes are stable over different calculation rounds)

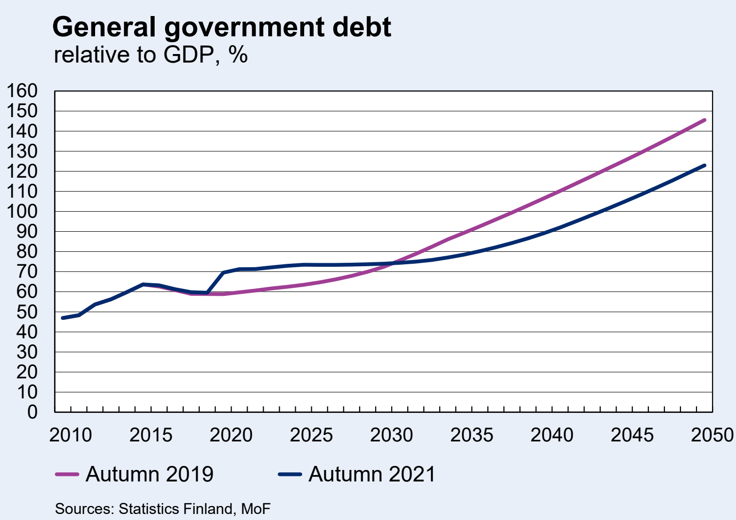
[2] Deficit excl. interest payments

Long-term public debt ratio before and after COVID-19 epidemic

It was already estimated before the COVID-19 epidemic that the general government debt ratio would be on the increase in the long-term. As a result of the epidemic and the downturn following it, the debt ratio reached high levels within one year. This has also happened in many other economic crises, such as financial crises and the recession of the 1990s. Boosted by such factors as GDP growth, the debt ratio typically falls during an economic upturn. In Finland, the decline in the debt ratio has been considerably slower than the increase in the debt ratio and the pre-crisis levels have not been achieved after the crises.

The debt ratio pressure calculation from 2025 onwards is based on the assumptions and methods used in sustainability calculations. From 2026 onwards, the change in the combined primary balance of central government, local government and counties is largely determined in accordance with the growth in age-related expenditure calculated using the SOME model. The model has been developed in the Ministry of Social Affairs and Health. Preparations for the fighter aircraft replacement project are also taken into account in general government debt. According to the calculations, the fighter aircraft project will increase the debt by about EUR 10 billion between 2021 and 2030. Surpluses of employment pension institutions do not affect general government borrowing, which has been taken into account in the calculations.

The chart below shows the debt ratio pressure calculation before the COVID-19 pandemic and the latest estimate of debt ratio trends.



The most significant differences between the pressure calculations made in autumn 2019 and autumn 2021 arise from long-term interest rate assumptions. The crisis resulting from the COVID-19 pandemic has prompted further easing of the monetary policy and it is thus assumed in the latest estimate that interest rates will rise much later than predicted in the autumn 2019 forecast[1]. For this reason, it was assumed in the forecast made two years ago that the debt ratio would increase more rapidly during the last years of the 2020s. Thus, it can be said that the COVID-19 epidemic has substantially increased the public debt ratio, while at the same time, lowering of interest rates has postponed the estimated debt growth pressures into a more distant future.

The estimate of the general government sustainability gap has improved since autumn 2019 as the calculation methods have become more accurate and source data has been updated. The updates have mainly concerned the long-term GDP growth estimates, and it is now expected that the gross domestic product will grow at a slightly faster rate due to a more rapid rise in employment and productivity. The changes have been described in more detail in the economic survey for autumn 2020[2] and in the Ministry of Finance report on the sustainability of Finland's public finances[3]. These updates have also led to a reduction in the debt ratio growth pressures for the coming decades. However, there is still a substantial long-term imbalance between general government revenue and expenditure and the structural problems facing general government finances have not disappeared. Ageing of the population will further increase age-related expenditure and the general government primary deficit in the coming decades. Moreover, because of demographic trends, productivity growth will be the only factor sustaining long-term economic growth, and for this reason, average annual GDP growth will remain modest (less than 1.5% in the period 2022–2040). According to what we know now, the COVID-19 epidemic has not had much impact on long-term growth prospects.

1 The trend in the effective interest rates on public debt (interest payments in relation to debt) have been on the decline for many years and interest expenses on general government debt are now at historic lows. The trend is expected to continue in the medium term. In the long-term calculations, interest rates are expected to remain extremely low for many years but a gradual rise is anticipated. It is assumed that the effective interest rates on public debt (interest payments in relation to debt) will rise to one per cent in the early 2030s and to four per cent in the 2040s. In the baseline scenario, the gradual rise in interest rates will have a delayed impact on government debt servicing costs. A rise in interest rates will also boost general government property income. However, most of this income is interest income accumulated by employment pension institutions and it does not have any impact on borrowing needs.

2 https://julkaisut.valtioneuvosto.fi/handle/10024/162468

3 https://julkaisut.valtioneuvosto.fi/handle/10024/162357

Management of general government finances based on low interest rates in the long term, would involve major uncertainties and risks. Future trends in interest rates and the debt ratio are characterised by significant uncertainties. The situation described in the baseline scenario, in which nominal economic growth is expected to remain above the effective nominal interest rates for a long period, is exceptional in historical terms. For this reason, we should also prepare for a situation in which interest rates will rise faster than what is assumed in the baseline scenario.

The interest on Finland's general government debt is largely determined by the general interest rate levels and a country-specific risk premium. Finland has little influence on general interest rate levels but it can influence the level of the risk premium by managing its general government finances in a sustainable manner. A faster than anticipated increase in interest rates would mean a higher public debt ratio and higher debt servicing costs. The higher the debts accumulated during low interest rates, the faster the increase in debt servicing costs

Supplementary statistics

1. Evolution of forecasts over time
2. Outturn data and forecasts used in budget process for 2016–2020
3. National balance of supply and demand
4. Financial balance of the Finnish economy
5. Measures prompted by the COVID-19 pandemic in Finland

Appendix table 1. Evolution of forecasts over time[1]

Forecast date	2020				2021**				2022**				2023**			
	Summer 2020	Autumn 2020	Winter 2020	Outcome	Winter 2020	Spring 2021	Summer 2021	Autumn 2021	Winter 2020	Spring 2021	Summer 2021	Autumn 2021	Winter 2020	Spring 2021	Summer 2021	Autumn 2021
GDP at market prices, change in volume, %	-6.0	-4.5	-3.3	-2.9	2.5	2.6	2.6	3.3	2.0	2.5	2.8	2.9	1.4	1.5	1.6	1.4
Consumption, change in volume, %	-0.7	-1.5	-2.3	-2.9	3.6	3.1	2.9	3.3	1.5	2.0	2.3	2.6	1.0	0.6	1.0	0.9
Exports, change in volume, %	-14.0	-12.5	-10.4	-6.7	5.0	4.6	4.7	5.6	4.6	4.7	6.3	5.8	2.2	3.7	3.6	3.4
Unemployment rate, %	8.5	8.0	7.8	7.7	8.0	7.8	7.4	7.8	7.6	7.2	6.9	6.8	7.2	6.9	6.6	6.4
Consumer price index, change, %	0.3	0.4	0.3	0.3	1.0	1.4	1.8	1.8	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7
Central government net lending, relative to GDP, %	-7.3	-7.2	-6.1	-5.5	-4.9	-5.0	-4.7	-4.2	-2.8	-2.9	-2.7	-2.8	-2.4	-2.3	-2.1	-1.7
General government net lending, relative to GDP, %	-8.2	-7.7	-6.1	-5.4	-5.2	-4.7	-4.3	-3.9	-3.3	-2.9	-2.6	-2.4	-2.6	-2.2	-1.9	-1.5
Central government debt, relative to GDP, %	54.8	53.3	53.1	52.9	55.6	55.3	55.6	55.1	56.3	56.1	55.9	55.3	57.3	57.6	57.2	55.9

[1] Economic Survey

Sources: Statistics Finland, MoF

Appendix table 2. Outturn data and forecasts used in budget process for 2016-2020

	Years 2016-2020		Average forecast accuracy	
	Forecast averages, % ch.	Outcome averages, % ch.	Forecast under-/over-estimation[1], pp.	Magnitude of forecast accuracy[2], pp.
GDP (volume)	1.4	0.9	0.5	1.6
GDP (value)	3.0	2.3	0.7	1.6
Private consumption (value)	2.5	1.2	1.3	2.1
Current account, relative to GDP, %	-0.5	-0.3	-0.2	0.9
Inflation	1.3	0.7	0.6	0.6
Wage bill	2.4	2.1	0.2	1.5
Unemployment rate	7.9	7.8	0.0	0.7
Central government debt, relative to GDP, %	47.8	47.4	0.4	4.1
Central government net lending, relative to GDP, %	-1.9	-2.5	0.6	1.4
General government net lending, relative to GDP, %	-1.6	-1.9	0.3	1.9

Forecasts are compared with March/June preliminary national accounts data.

Averages for the past five years are calculated on the basis of spring and autumn forecasts concerning the budget year.

[1] Over- or underestimation is indicated by average forecast accuracy.

[2] The average of absolute accuracy values indicates the average magnitude of forecast accuracy, regardless of the direction of deviation.

Appendix table 3. National balance of supply and demand, EUR million

	Current prices					
	2018	2019	2020	2021**	2022**	2023**
GDP at market prices	233 468	240 097	236 188	248 883	260 870	269 381
Imports of goods and services	92 739	95 283	84 594	92 967	99 866	104 728
Total supply	**326 207**	**335 380**	**320 782**	**341 874**	**360 778**	**374 197**
Exports of goods and services	89 810	95 657	85 503	94 053	101 325	106 450
Consumption	177 429	181 629	178 368	187 776	196 189	201 817
private	123 937	125 992	120 708	126 762	133 677	138 672
public	53 492	55 637	57 660	61 014	62 512	63 145
Investment	56 183	57 003	57 128	60 011	62 878	65 656
private	46 224	46 517	45 478	47 772	50 448	53 361
public	9 959	10 486	11 650	12 239	12 431	12 295
Total demand	**326 207**	**335 209**	**321 462**	**342 538**	**361 442**	**374 861**
	At reference year 2015 prices; not additive					
	2018	2019	2020	2021**	2022**	2023**
GDP at market prices	226 827	229 874	223 212	230 670	237 373	240 798
Imports of goods and services	88 674	90 726	84 877	89 322	93 883	96 847
Total supply	**283 360**	**287 949**	**276 701**	**287 291**	**297 354**	**303 051**
Exports of goods and services	85 890	91 754	85 579	90 383	95 585	98 823
Consumption	173 984	175 826	170 807	176 435	180 982	182 646
private	120 869	121 661	115 984	119 660	124 230	126 692
public	53 115	54 175	54 453	56 390	56 389	55 626
Investment	53 080	52 238	51 859	53 319	54 817	56 267
private	43 534	42 470	41 041	42 220	43 770	45 542
public	9 545	9 774	10 847	11 128	11 066	10 728
Total demand	**315 477**	**320 856**	**308 605**	**320 277**	**331 378**	**337 622**

Appendix table 4. Financial balance of the Finnish economy

	2016	2017	2018	2019	2020
	relative to GDP, %				
Gross investment	22.7	23.3	24.1	23.7	24.2
households and non-profit institutions	6.7	6.9	7.1	7.0	7.1
non-financial corporations and financial and insurance corporations	11.9	12.4	12.6	12.4	12.2
general government	4.1	4.1	4.3	4.4	4.9
Gross saving[1]	21.3	23.3	23.5	24.0	24.9
households and non-profit institutions	3.5	3.6	3.9	4.8	7.3
non-financial corporations and financial and insurance corporations	15.5	16.3	16.2	15.8	18.3
general government	2.3	3.3	3.4	3.4	-0.7
Financial surplus	-1.9	-0.7	-1.8	-0.2	0.8
households and non-profit institutions	-3.6	-3.5	-3.3	-2.5	-0.0
non-financial corporations and financial and insurance corporations	3.3	3.4	2.4	3.2	6.0
general government	-1.7	-0.7	-0.9	-0.9	-5.4
Statistical discrepancy	0.0	0.0	0.0	0.1	-0.3

[1] Incl. capital transfers (net)

Appendix table 5. Measures prompted by the COVID-19 pandemic in Finland EUR, bn

Action	Measures with no direct impact on general government budgetary position (other than financial investments)	Financial investments	Expenditure increases in the years in question and income losses		
			2020	2021	2022
Support for enterprises Grants provided for companies by Business Finland and ELY Centres, support for solvency of self-employed persons, support for catering entrepreneurs, support for agricultural and natural resource economy enterprises, general cost support for companies, estimated increase in Finnvera's loss compensation, support for public transport, Finavia capitalisation and Finnair hybrid loan Increasing Business Finland's lending authorisations, capitalisation of Finnish Industry Investment Ltd for a new stabilisation programme, capitalisation of the Finnish Minerals Group		**1.5**	**2.3**	**1.7**	**0.2**
Expansion of unemployment security and social security Eliminating the waiting period, speeding up the lay-off procedure, making entrepreneurs eligible for unemployment security, extending the payment period of startup grants, streamlining unemployment benefit payments			**0.7**	**0.2**	**0.0**
Health and social services resources and equipment purchases and other expenditure increases prompted by the COVID-19 pandemic Equipment purchases, vaccine research, vaccine purchases, testing and tracing			**1.1**	**2.0**	**0.0**
Investment projects Basic transport infrastructure maintenance, transport network development, renovation construction, public transport support, construction of sports facilities, and recreational and green areas			**0.3**	**0.1**	**0.1**
Other measures Support measures in early childhood education and care and at different levels of education, support for children, young people and families, services for the elderly, additional starting places in higher education, developing continuous learning, research appropriations for the Academy of Finland, operating expenditure of ministries and government agencies Central government support for social security funds	0.6		**1.5**	**0.3**	**0.1**
Support for local government Universal transfers from central government that are not expected to have any impact on general government finances (including temporary increase in corporation tax apportionment)	**3.1**				

Action	Measures with no direct impact on general government budgetary position (other than financial investments)	Financial investments	Expenditure increases in the years in question and income losses		
			2020	2021	2022
Temporary reduction of TyEL contributions Lowering of private-sector pension contributions for the period 1 May–31 December 2020. Funding will come from the EMU buffer fund of the employment pension scheme. The buffer fund will be augmented again by raising the pension contributions for the period 2022–2025.			**-1.1**	**0.0**	**0.3**
Tax relief* Easing of payment terms for taxes due between 1 March 2020 and 31 August 2020 and lowering the interest on late payments from 7% to 2.5%. The easing also applied to value added tax payments due in the period January–March. Taxpayers could also apply for eased payment arrangements for the period between 21 April and 31 August 2021. Assessing the impacts of the delays in the tax revenue for 2020 and 2021 to 2022 and 2023.	-0.5				
Guarantees** Increasing Finnvera's domestic financing authorisations from EUR 4.2 to EUR 12 billion. Approximately EUR 2 billion of the authorisations had been used in spring 2020, which means that the increase in authorisations was about EUR 10 billion. State guarantees to cover Finnair's financing needs and to shipping companies to ensure cargo traffic important to security of supply	**10.8**				
Commercial papers** Investments in commercial papers by the Bank of Finland and the State Pension Fund.	**2.0**				
Impacts weakening general government finances, total			**7.0**	**4.3**	**0.1**
Increase in on-budget appropriations (all years)		**14.7**			

*Actual ** Maximum amount

Relative to GDP (according to national accounts):	**2.9 %**	**1.7 %**	**0.0 %**

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