



MINISTRY
OF FINANCE

Economic Survey

Spring 2021

Economic Prospects

Publications of the Ministry of Finance – 2021:23

Publications of the Ministry of Finance 2021:23

Economic Survey

Spring 2021

Economics Department

Ministry of Finance, Helsinki 2021

Publication sale

**Online bookstore
of the Finnish
Government**

vnjulkaisumyynti.fi

Publication distribution

**Institutional Repository
for the Government
of Finland Valto**

julkaisut.valtioneuvosto.fi

Ministry of Finance

© 2021 Authors and Ministry of Finance

ISBN pdf: 978-952-367-497-4

ISSN pdf: 1797-9714

Layout: Government Administration Department, Publications

Helsinki 2021

Economic Survey, Spring 2021

Publications of the Ministry of Finance 2021:23**Publisher** Ministry of Finance**Subject** Economic Prospects**Group Author** Economics Department**Language** Finnish**Pages** 112

Abstract

Finland's gross domestic product is expected to grow by 2.6% in 2021, 2.5% in 2022 and 1.5% in 2023. The growth will accelerate towards the end of 2021 and the upturn will also boost economic growth in 2022.

The economy will not fully recover from the COVID-19 pandemic until the end of 2021 as the substantial increase in new cases in spring 2021 will continue to cast a shadow on economic activities. Domestic demand for services will remain weak and Finnish exports are affected by the continuation of the pandemic. The economy will only get back to normal when the epidemic can be considered to be under control.

The forecast is based on the assumption that the COVID-19 incidence will fall to a low level by summer 2021 as a result of restrictions, vaccinations and seasonal variation of the disease. Restrictions can be relaxed and lifted when the disease is no longer spreading.

General government deficit will contract sharply in 2022 as the support measures prompted by the COVID-19 epidemic will come to an end and the economy will recover. However, the general government deficit will persist. Public debt-to-GDP ratio will increase from the current level of 70% to over 75% by the year 2025.

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

ISBN PDF 978-952-367-497-4**ISSN PDF** 1797-9714**URN address** <http://urn.fi/URN:ISBN:978-952-367-497-4>

Taloudellinen katsaus, kevät 2021

Valtiovarainministeriön julkaisuja 2021:23

Julkaisija Valtiovarainministeriö

Teema

Talousnäymät

Yhteisötekijä Kansantalouselosasto

Kieli Suomi

Sivumäärä

112

Tiivistelmä

Bruttokansantuotteen arvioidaan kasvavan 2,6 % v. 2021, 2,5 % v. 2022 ja 1,5 % v. 2023. Vuoden 2021 loppua kohden kiihtyvä kasvu nostaa myös vuoden 2022 talouskasvua.

Talouden selvä toipuminen covid-19-pandemiasta siirtyy vuoden 2021 loppupuolelle, sillä tautitapausten määrän voimakas nousu vuoden 2021 keväällä luo edelleen epävarmuutta taloudenpitäjien toiminnalle. Kotimaassa palveluiden kysyntä pysyy edelleen heikkona ja vienti kärsii pandemian jatkumisesta. Talous voi normalisoitua vasta, kun epidemiatilanteen voidaan arvioida olevan hallinnassa.

Ennuste perustuu oletukselle, että covid-19-epidemiaan liittyvien tautitapausten ilmaantuvuus painuu matalalle tasolle kesään 2021 mennessä rajoitusten, rokotushjelman edistymisen sekä taudin kulkuun liittyvän kausivaihtelun seurauksena. Vakaa epidemiatilanne mahdollistaa rajoitusten lieventämisen ja purkamisen.

Julkisen talouden alijäämä pienenee v. 2022 voimakkaasti, kun covid-19-epidemian vuoksi päätetyt tukitoimet päättyvät ja talous elpyy. Julkinen talous jää kuitenkin edelleen alijäämäiseksi. Julkinen velka suhteessa bruttokansantuotteeseen kasvaa nykyisestä vajaasta 70 prosentista yli 75 prosenttiin vuoteen 2025 mennessä.

Asiasanat

talousnäymät, julkinen talous, taloudellinen kehitys, budjettiesitys

ISBN PDF 978-952-367-497-4

ISSN PDF

1797-9714

Julkaisun osoite <http://urn.fi/URN:ISBN:978-952-367-497-4>

Ekonomisk översikt, våren 2021

Finansministeriets publikationer 2021:23**Tema**

Ekonomiska utsikter

Utgivare

Finansministeriet

Utarbetad av

Ekonomiska avdelningen

Språk

Finska

Sidantal

112

Referat

Bruttonationalprodukten beräknas öka med 2,6 procent 2021, 2,5 procent 2022 och 1,5 procent 2023. Den snabbare tillväxten mot slutet av 2021 leder även till ökad ekonomisk tillväxt 2022.

Den tydliga ekonomiska återhämtningen från covid-19-pandemin skjuts fram till slutet av 2021, eftersom den kraftiga ökningen av antalet sjukdomsfall våren 2021 fortsättningsvis skapar osäkerhet för de ekonomiska aktörernas verksamhet. I Finland är efterfrågan på tjänster fortfarande svag och exporten lider av den fortsatta pandemin. Ekonomin kan normaliseras först när epidemiläget bedöms vara under kontroll.

Prognosen bygger på antagandet att incidensen av sjukdomsfall inom covid-19-epidemin kommer att sjunka till en låg nivå inför sommaren 2021 till följd av restriktioner, framsteg i vaccinationsprogrammet och säsongsvariationer i epidemins förlopp. I ett stabilt epidemiologiskt läge kan man lindra och häva begränsningar.

Underskottet i de offentliga finanserna minskar kraftigt under 2022, när de stödåtgärder som vidtagits till följd av covid-19-epidemin upphör och ekonomin återhämtar sig. De offentliga finanserna kommer dock fortfarande att uppvisa ett underskott. Den offentliga sektorns skuld i förhållande till bruttonationalprodukten ökar från nuvarande cirka 70 procent till dryg 75 procent fram till 2025.

Nyckelord

ekonomiska utsikter, offentlig ekonomi, ekonomisk utveckling, budgetförslag

ISBN PDF

978-952-367-497-4

ISSN PDF

1797-9714

URN-adress<http://urn.fi/URN:ISBN:978-952-367-497-4>

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 SPRING 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 quarterly national accounts data published by Statistics Finland and on other public statistical sources available by 30 April 2021. The macroeconomic projections take account of the decisions taken by the Government in its spending limits discussions on 29 April 2021.

Helsinki May 2021

Ministry of Finance Economics Department

Mikko Spolander
Director General

Jukka Railavo
Senior Financial Advisor
Head of Macro Forecasting

Marja Paavonen
Senior Financial Advisor
Head of Public Finance

Contents

| | |
|---|----|
| Preface | 9 |
| Summary | 12 |
| 1 Economic outlook | 30 |
| 1.1 Global economy | 30 |
| 1.1.1 Global economy will recover this year | 30 |
| 1.1.2 Financial markets are affected by uncertainties | 32 |
| 1.1.3 Inflation and long-term interest rates are on the rise | 33 |
| 1.1.4 Rapid rise in raw material prices | 33 |
| 1.1.5 World trade will recover and a period of rapid growth is expected | 34 |
| 1.1.6 Risks are skewed to the downside | 34 |
| 1.2 Foreign trade | 36 |
| 1.2.1 Exports and imports | 36 |
| 1.2.2 Prices and current account | 38 |
| 1.3 Domestic demand | 39 |
| 1.3.1 Private consumption | 39 |
| 1.3.2 Public consumption | 44 |
| 1.3.3 Private investment | 45 |
| 1.3.4 Public investment | 48 |
| 1.4 Domestic production | 49 |
| 1.4.1 Total output | 49 |
| 1.4.2 Secondary production | 53 |
| 1.4.3 Services | 56 |
| 1.5 Labour force | 58 |
| 1.6 Incomes, costs and prices | 61 |
| 1.6.1 Wages and salaries | 61 |
| 1.6.2 Consumer prices | 63 |
| 2 General government finances | 65 |
| 2.1 General government | 65 |
| 2.1.1 General government debt | 73 |
| 2.2 Central government | 78 |
| 2.3 Local government | 91 |
| 2.4 Wellbeing services counties | 96 |

| | | |
|-------|--|-----|
| 2.5 | Social security funds..... | 98 |
| 2.5.1 | Employment pension institutions..... | 98 |
| 2.5.2 | Other social security funds..... | 100 |
| 2.5.2 | Other social security funds..... | 100 |
| 2.6 | Long-term sustainability of general government finances..... | 101 |

Boxes:

| | | |
|--|--|----|
| | RRF and calculations of its economic impacts..... | 24 |
| | Fiscal stance..... | 71 |
| | Long-term trends in public debt ratio | 76 |
| | Central government on-budget accounts and expenditure in 2022-2025.. | 81 |

| | | |
|--|-------------------------------|-----|
| | Supplementary statistics..... | 107 |
|--|-------------------------------|-----|

Preface

All economic projections prepared by forecasters are more or less similar. There are differences between details and not all growth drivers are identically weighted. However, the core message in all forecasts is that a rapid economic recovery can be expected this year as the coronavirus epidemic is losing force. The growth will continue into next year but after that it will slow down to a rate determined by economic resources and our ability to use them.

The latest macroeconomic forecast produced by the Ministry of Finance is very similar.

A new COVID-19 wave has dampened economic growth during the first months of the year. As we are progressing towards summer, the seasonal variation of the epidemic is slowing down the spread of the disease. At the same time, vaccinations are helping to quell the epidemic and mobility and business restrictions can be lifted. The assumption in the forecast is that after summer, the epidemic will no longer significantly restrict people's daily lives or business activities.

Economic uncertainties have boosted household saving and as the uncertainties recede, excessive savings will be channelled to consumption. The economic recovery will also encourage companies to launch new investment projects. With public spending also boosting total demand in Finland and (helped lead by the United States) in global scale this year, economic growth may well accelerate significantly during the second half of the year and extend into 2022. According to the Ministry of Finance, the gap created by the epidemic in the Finnish economy in 2020 will close rapidly in 2021 and 2022.

The pandemic, the resulting increases in health spending, the restrictions on mobility and business activities to quell the disease, the impact of the restrictions on output and the central government subsidies have increased Finland's general

government deficit. According to a Ministry of Finance forecast, Finland's general government debt will grow from EUR 143 billion at the end of 2019 to EUR 177 billion at the end of 2021.

Increase in public spending and financing it through borrowing have not only been inevitable but they have also been essential to soften the economic impact of the epidemic and to maintain total demand. Without higher public demand, economic output and employment would have remained at lower level. By boosting total demand, higher public spending has prevented output from contracting, companies from going bankrupt, employment rate from declining, skills and expertise from disappearing and production capacity from being destroyed.

The Finnish economy is projected to return to normal during 2022. Unfortunately, in general government finances, post-epidemic normality means a gradual decline characterised by ageing population, weak growth prospects and a chronic public sector deficit.

In such a situation, there are good reasons to shift the economic policy focus from acute crisis management to measures that help to boost Finland's economic performance and consolidate public finances. General government finances can only be on a stable and credible basis if they can be adjusted in accordance with economic performance. By enhancing its economic performance, Finland can also have more room for manoeuvre in its public finances.

Many of the increases in general government spending envisaged in the Programme of Prime Minister Sanna Marin's Government and Finland's Sustainable Growth Programme (such as the measures supporting expertise, development and introduction of new technologies, and green transformation) will probably boost output, productivity and employment in the long term.

However, in the long term, economic performance is determined by structural factors. Prime Minister Sanna Marin's Government has taken decisions to support these activities on a number of occasions during its term, most recently in the negotiations on the General Government Fiscal Plan for the period 2022-2025.

The decisions should be based on a broad understanding on which measures are the most effective way to boost employment, productivity and competitiveness in a manner that will consolidate general government finances in the long term.

Employment can be boosted by ensuring an adequate supply of working-age and skilled workforce that is available for the labour market and directing the labour force to areas where it can be used in the most productive manner. Finland's working-age population will be shaped by birth and mortality rates and immigration. Ensuring that young people can move seamlessly from education and training to the labour market, people do not leave the labour market for long periods in the middle of their careers and people can decide how long to stay in working life would increase the labour market participation rate. A well-functioning labour market and a good match between demand for and supply of labour will prevent long-term unemployment and growth in structural unemployment.

At the same time, labour productivity will increase when more capital and better technology is used, when there is access to better skills, practices and management methods and when labour force moves to areas with higher productivity. Productivity can only increase in a favourable and internationally competitive investment environment.

Fortunately, many of the factors supporting employment and productivity growth can be influenced by economic policy measures.

Summary

Economic outlook for the period 2021 – 2023

Finland's gross domestic product is expected to grow by 2.6% in 2021. The economy will not fully recover from the COVID-19 pandemic until the end of 2021 as the substantial increase in new cases in spring 2021 will continue to cast a shadow on economic activities. Domestic demand for services will remain weak and Finnish exports are affected by the continuation of the pandemic. The economy will only get back to normal when the epidemic can be considered to be under control.

The forecast is based on the assumption that the COVID-19 incidence will fall to a low level by summer 2021 as a result of restrictions, vaccinations and seasonal variation of the disease. Restrictions can be relaxed and lifted when the disease is no longer spreading under control.

The GDP is expected to grow by 2.5% in 2022 and by 1.5% in 2023. The growth will accelerate towards the end of 2021 and the upturn will also boost economic growth in 2022.

General government deficit will contract sharply in 2022 as the support measures prompted by the COVID-19 epidemic will come to an end and the economy will recover. However, the general government deficit will persist. Public debt-to-GDP ratio will increase from the current level of 70% to 75% by the year 2025.

Strong measures to stimulate the global economy

Substantial stimulus measures, vaccinations and lifting of restrictions will help the world economy to recover from last year's downturn triggered by the pandemic. Both the European Union and the United States have introduced massive stimulus packages. This year, the world economy will grow by 5.2% after contracting by 3.4% in 2020. Growth will slow down to 3.8% next year and to 3.1% in 2023.

In the euro area, the outlook for industries but also for services has improved substantially in spring 2021. The pent-up consumption is expected to be released during the year and support private consumption. The stimulus package of the EU is expected to support economic growth, especially in the period 2022-2023.

The US economy will recover this year, thanks to massive monetary and fiscal stimulus. The outlook for industries and services is bright. Unemployment has decreased dramatically from the peak figures of spring 2020. Post-stimulus inflationary expectations have led to higher interest rates on government loans.

World trade will grow by 6.5% this year after the collapse of 2020. The United States and emerging economies will act as the engines for growth, while in the euro area, trade will grow at a more moderate rate. Growth in world trade will slow down in 2022 and 2023 but will continue at a relatively rapid rate.

Inflation has accelerated in recent months, especially in the United States, but also in the euro area. Massive fiscal stimulus in the United States has been the key factor contributing to this trend but a rise in energy prices has also played a role. Interest rates on government loans have increased, especially in the United States, but also in the euro area. Interest rates on government loans and short-term market rates are expected to rise moderately in the next few years as economies will stabilise after the pandemic.

Savings accumulated during the coronavirus year will increase consumption as the epidemic recedes

Economic growth in Finland will accelerate to 2.6% in 2021. As a result of the epidemic, growth will still be slow during the first half of year but will gradually gather speed during the summer. Growth will be substantially above average towards the end of the year. Private consumption will increase by 3.5% in 2021 as pent-up demand will be released boosting demand for goods and services. Household savings rate reached 5.7% in 2020. A rapid decline in the savings rate is expected in the next few years as most of the savings will be released for consumption. Foreign travel and services for sports and cultural events are expected to be the last consumption items to recover.

Private investments will contract by one per cent in 2021 due to a weak first half of the year and a decline in construction investments. At the same time, there are already signs of recovery in machinery and equipment investments as the growth prospects for the global economy are improving.

In Europe, foreign trade is expected to recover at a slower pace than world trade during the first half of 2021. The outlook for exports during the forecast period is favourable even though the pandemic situation has deteriorated lately. The purpose of the global stimulus measures is to boost consumption and investments and thus an upturn in economic activity will also support Finland's foreign trade.

Driven by goods exports, the volume of exports is expected to grow by 4.6% in 2021. The growth in the largest service export sectors (ICT and other business services) has been rapid since the second half of 2020. Growth in tourism and transport services depends on how rapidly the risks associated with the COVID-19 pandemic will recede.

An increase in the number of new COVID-19 cases will mainly impact the demand for and supply of services and reverse the positive trend in employment. The growth in employment can be rapid once the disease is brought under control. Because of a fall during the first months of the year, employment is only expected to grow by 0.1% in 2021. As the working-age population declines, the employment rate will reach 71.7%.

Driven by wage drifts and negotiated pay rises, nominal wages will increase by 2.7% in 2021. Measured on the basis of the consumer price index, an inflation rate of 1.4 % is forecast for 2021. As the economy is bouncing back, a moderate rise in consumer prices can also be expected.

The GDP is expected to grow by 2.5 % in 2022 and by 1.5 % in 2023. The growth will accelerate towards the end of 2021, which will also boost economic growth in 2022. In 2022, consumption growth will slow down slightly (to 2.9%) and a further deceleration is forecast for 2023 (to 1.6%). Growth in earnings and an improved employment situation will boost household purchasing power. A decrease in the savings rate will ensure that consumption will also grow more rapidly than real income at the end of the outlook period.

Housing investments will recover in 2022 as the number of new housing starts will approach the long-term average. An increase of 2.0% is expected in 2023. Construction of industrial premises will boost growth in investments and a substantial increase in industrial investments as a whole is expected. Renewal of the energy infrastructure in accordance with Finland's Sustainable Growth Programme will also stimulate construction investments.

The Kemi bioproduct mill will be one of the projects in which substantial investments in machinery and equipment will be made in 2022 and 2023. There are also other major industrial projects under way in Finland and research and development investments will grow throughout the outlook period, partially supported by the Recovery and Resilience Facility of the EU. Private investments will grow by 4.8% in 2022 and 4.2% in 2023.

Strong export growth will continue in 2022 and a growth rate of 4.7% is expected. Finnish exports are forecast to reach the pre-crisis levels in early 2022. Export growth will slow down slightly in 2023, to 3.7%.

Volume of imports will grow by 4.1% in 2021, by 3.8% in 2022 and by 3.1% in 2023. Private consumption and industrial output will increase during the outlook period. Tourism will recover as the risks arising from the COVID-19 pandemic recede and this will also boost imports towards the end of the outlook period.

Economic recovery will gather speed in 2022 and 2023, especially in the service sector. The number of employed persons is expected to increase by just over one percent in 2022. Growth will slow down in 2023 as the level of economic activity decreases. The number of employed persons will only exceed the 2019 levels in 2023 when the employment rate will increase to just over 73%.

Driven by rising earnings and higher employment, the wage bill is expected to increase by more than three per cent in 2022 and 2023. At the same time, measured with the national consumer price index, inflation is expected to accelerate to between 1.5 and 1.7%. Rise in wages will be gradually passed on to prices of services.

General government deficit will persist after the epidemic

General government deficit will remain high this year as the support measures prompted by the COVID-19 epidemic and the reduction of the service and care backlog that has accumulated during the epidemic will keep public expenditure at high level. There will be a sharp contraction in the imbalance between expenditure and revenue next year as economic growth will continue at a brisk pace and the support measures are coming to an end.

The substantial general government deficit will not disappear with the epidemic. A general government deficit-to-GDP ratio of 1.6% (EUR 4.6 billion) is projected for mid-2020s. The age structure of the population is changing, which has increased public spending for many years. At the same time, economic growth prospects are subdued and they are further weakened by a decline in the working-age population. Due to structural factors, Finland's general government finances have suffered from an imbalance between expenditure and revenue since 2009.

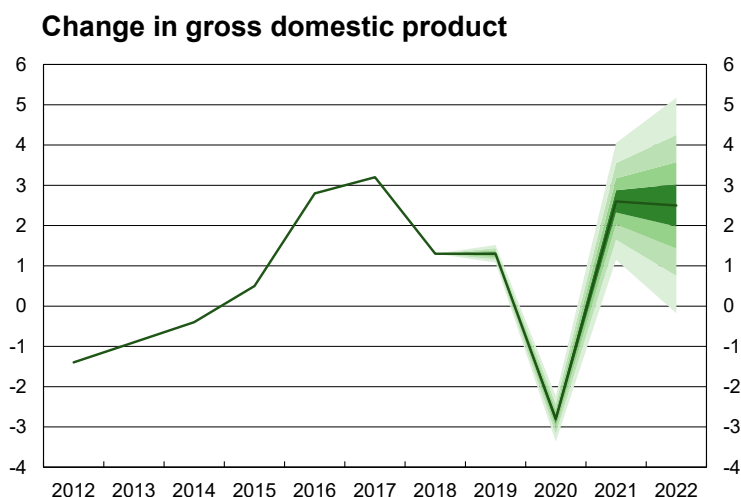
Public debt-to-GDP ratio will increase from the current level of 70% to over 75% by 2025, and it is estimated that the debt ratio will continue to grow after that year. There is a long-term imbalance (sustainability gap) between general government revenue and expenditure, which amounts to about 3% of GDP, (about EUR 8 billion at 2025 levels).

The forecast takes into account the Government proposal for a health and social services reform, which is currently being discussed by Parliament. In the health and social services reform, the responsibility for health and social services and rescue services would be transferred from municipalities to wellbeing services counties from 2023 onwards. At the same time, the pressure to increase health and social services expenditure caused by the ageing of the population would be shifted to central government, which would provide most of the funding for the counties.

Uncertainty of economic outlook

The risks in the forecast arise from the question whether the epidemic will be under control in the third quarter of 2021. Having the situation under control means that Finland has been able to return to the new normal without the epidemic or the measures to mitigate it significantly restricting everyday life or business activities.

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 1% and 4% in 2021. There is also an 80% probability that GDP growth will be between 0% and 5% 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.



The growth rate may fall short of the projections if there is a new spike in COVID-19 incidence in autumn 2021 in Finland or in important export markets. An increased need for hospital care would lead to far more stringent restrictions, which would further slow down economic growth.

A prolonged epidemic in Finland would have a particularly strong impact on private consumption and demand for services. At the same time, continuation of the pandemic would create threats to the functioning of the international market and, through production chains, to the Finnish export industry. In the absence of international demand, companies would find themselves in an even more difficult situation. The economy may recover quickly even if the epidemic continued beyond what is assumed.

The uncertain investment outlook might prompt companies to postpone investments or cancel them altogether. A situation in which the Recovery and Resilience Facility would encourage more private investments than expected can be seen as a positive risk for such investments.

Table 1. Key forecast figures

| | 2020 | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|----------------------|------------|---------------------|------------|-------------|------------|------------|------------|
| | EUR bn | change in volume, % | | | | | |
| GDP at market prices | 237 | 1.3 | 1.3 | -2.8 | 2.6 | 2.5 | 1.5 |
| Imports | 84 | 5.6 | 2.2 | -6.6 | 4.1 | 3.8 | 3.1 |
| Total supply | 322 | 2.5 | 1.5 | -3.8 | 3.0 | 2.8 | 1.9 |
| | | | | | | | |
| Exports | 85 | 1.4 | 6.7 | -6.6 | 4.6 | 4.7 | 3.7 |
| Consumption | 178 | 1.8 | 1.1 | -2.7 | 3.1 | 2.0 | 0.6 |
| private | 120 | 1.8 | 0.7 | -4.9 | 3.5 | 2.9 | 1.6 |
| public | 58 | 1.8 | 2.0 | 2.3 | 2.3 | 0.0 | -1.5 |
| Investment | 56 | 3.5 | -0.9 | -3.1 | -0.2 | 3.5 | 2.8 |
| private | 45 | 3.0 | -1.6 | -4.6 | -1.0 | 4.8 | 4.2 |
| public | 11 | 6.0 | 2.3 | 3.4 | 3.3 | -2.0 | -3.4 |
| Total demand | 321 | 2.4 | 1.7 | -3.8 | 3.4 | 3.2 | 2.3 |
| domestic demand | 235 | 2.7 | -0.2 | -2.7 | 3.0 | 2.6 | 1.8 |

Table 2. Other key forecast figures

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|------|------|------|--------|--------|--------|
| GDP, EUR bn | 234 | 240 | 237 | 248 | 258 | 267 |
| Services, change in volume, % | 2.1 | 1.5 | -3.0 | 2.6 | 3.0 | 1.4 |
| Industry, change in volume, % | -2.8 | 2.6 | -2.2 | 3.2 | 3.0 | 1.8 |
| Labour productivity, change, % | -1.3 | 0.2 | -0.8 | 2.0 | 1.6 | 1.0 |
| Employed labour force, change, % | 2.7 | 1.0 | -1.5 | 0.1 | 1.2 | 0.6 |
| Employment rate, % | 71.7 | 72.5 | 71.6 | 71.7 | 72.6 | 73.2 |
| Unemployment rate, % | 7.4 | 6.7 | 7.8 | 7.8 | 7.2 | 6.9 |
| Consumer price index, change, % | 1.1 | 1.0 | 0.3 | 1.4 | 1.5 | 1.7 |
| Index of wage and salary earnings, change, % | 1.7 | 2.1 | 1.8 | 2.7 | 2.5 | 2.5 |
| Current account, EUR bn | -4.3 | -0.8 | 0.7 | 0.3 | 0.9 | 1.3 |
| Current account, relative to GDP, % | -1.8 | -0.3 | 0.3 | 0.1 | 0.4 | 0.5 |
| 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 | -0.2 | -0.1 | -0.1 |
| General government expenditure, relative to GDP, % | 53.4 | 53.2 | 56.7 | 56.3 | 54.0 | 53.1 |
| Tax ratio, relative to GDP, % | 42.4 | 42.2 | 41.7 | 42.3 | 41.6 | 41.2 |
| General government net lending, relative to GDP, % | -0.9 | -1.0 | -5.4 | -4.7 | -2.9 | -2.2 |
| Central government net lending, relative to GDP, % | -1.3 | -1.1 | -5.6 | -5.0 | -2.9 | -2.3 |
| General government gross debt, relative to GDP, % | 59.7 | 59.5 | 69.2 | 71.6 | 72.4 | 73.9 |
| Central government debt, relative to GDP, % | 44.9 | 44.3 | 52.6 | 55.3 | 56.1 | 57.6 |

Medium-term outlook for the period 2024-2025

In the medium term (in the years 2024 and 2025), economic growth will slow down to just over one per cent but will nevertheless slightly exceed potential output growth¹.

In the short term, changes in the quantity of labour input only have a minor impact on potential output. In the middle of the decade, labour input will start declining as the working-age population shrinks and there is no longer any improvement in the participation rate. Structural unemployment also limits the increase 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 outlook, the investment rate fell, which will slow down potential output growth. Growth in capital stock will boost potential output by less than 0.5% annually in the coming years. Capital contribution will increase slightly over the medium term.

Total factor productivity is the third source of potential output growth. It has grown more rapidly in recent years, compared with the early 2010s. However, productivity growth remains weak compared with the early 2000s. The weak growth can be explained by such factors as structural changes in the Finnish economy. The output of high-productivity sectors has declined and services have become more predominant in the overall structure of the economy. Total factor productivity growth trend is expected to be slightly below one per cent in the medium term, compared with an average annual growth of more than two per cent in the early years of the 2000s.

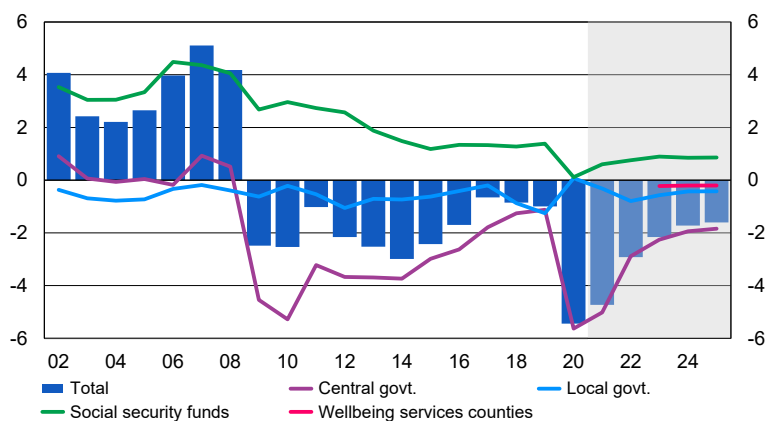
1 The medium-term economic outlook can be estimated on the basis of the potential output, which is considered to define the growth prerequisites for the economy. In its assessments of potential output, the Ministry of Finance uses the production function method jointly developed by the European Commission 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 | -2.8 | 2.6 | 2.5 | 1.5 | 1.4 | 1.2 |
| GDP, EUR bn | 240 | 237 | 248 | 258 | 267 | 276 | 284 |
| Consumer price index, change, % | 1.0 | 0.3 | 1.4 | 1.5 | 1.7 | 1.7 | 1.8 |
| Unemployment rate, % | 6.7 | 7.8 | 7.8 | 7.2 | 6.9 | 6.7 | 6.5 |
| Employment rate, % | 72.5 | 71.6 | 71.7 | 72.6 | 73.2 | 73.6 | 73.8 |
| General government net lending, relative to GDP, % | -1.0 | -5.4 | -4.7 | -2.9 | -2.2 | -1.7 | -1.6 |
| Central government | -1.1 | -5.6 | -5.0 | -2.9 | -2.3 | -1.9 | -1.8 |
| Local government | -1.3 | 0.1 | -0.3 | -0.8 | -0.6 | -0.4 | -0.4 |
| Wellbeing services counties | | | | | -0.2 | -0.2 | -0.2 |
| Social security funds | 1.4 | 0.1 | 0.6 | 0.8 | 0.9 | 0.8 | 0.9 |
| Structural balance, relative to GDP, % | -1.3 | -3.4 | -3.5 | -2.4 | -1.8 | -1.6 | -1.6 |
| General government gross debt, relative to GDP, % | 59.5 | 69.2 | 71.6 | 72.4 | 73.9 | 74.8 | 75.6 |
| Central government debt, relative to GDP, % | 44.3 | 52.6 | 55.3 | 56.1 | 57.6 | 58.4 | 59.0 |
| Output gap, % of potential output ¹ | 0.3 | -3.5 | -2.2 | -0.9 | -0.6 | -0.2 | -0.0 |

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

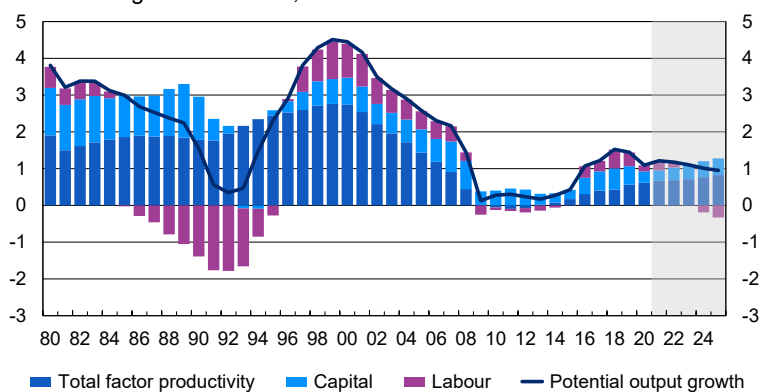
General government financial balance relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

Contributions to potential output growth according to EU method, %



Sources: Statistics Finland, MoF

VM34170

RRF and calculations of its economic impacts

Recovery and Resilience Facility as part of Next Generation EU

The Recovery and Resilience Facility (RRF) is part of Next Generation EU, which is divided into seven programmes. The Recovery and Resilience Facility is by far the largest of the programmes, and according to current estimates, Finland will receive about EUR 2.1 billion in grants under this programme. Finland will receive about EUR 2.9 billion from Next Generation EU as a whole.

To qualify for funding from the RRF, each Member State must present its own national recovery and resilience plan (RRP). Finland's national recovery and resilience plan is part of Finland's sustainable growth programme, and the final version of the plan will be presented in May. The plan will also contain economic impact assessments for the Recovery and Resilience Facility.

The impacts of Next Generation EU are considered in the spring economic forecast prepared by the Ministry of Finance Economics Department. They also include the impacts of the RRF-financed stimulus measures introduced elsewhere in the EU. The alternative GDP path prepared by the Economics Department, which does not include the impacts of the RRF, is examined in the box below.

GDP path without the impacts of RRF

The preliminary version of Finland's recovery and resilience plan, presented in March, contained estimates of the plan's impacts on total output. In the short-term estimates, fiscal multiplier 1 was used to describe the impacts of stimulus on total output. The fiscal multiplier gives the ratio of GDP growth to general government expenditure growth (in euros). If the multiplier is higher than 1, GDP in euro terms is growing more rapidly than general government spending. In that case, fiscal policy also helps to stimulate private sector demand. If the multiplier remains below 1, GDP grows more slowly than general government expenditure. The Ministry of Finance has produced estimates¹ of the fiscal multiplier over different time frames using the figures for Finland. Irrespective

1 Ministry of Finance, Economic Survey, Autumn 2019, box.
Available: <http://urn.fi/URN:ISBN:978-952-367-032-7>

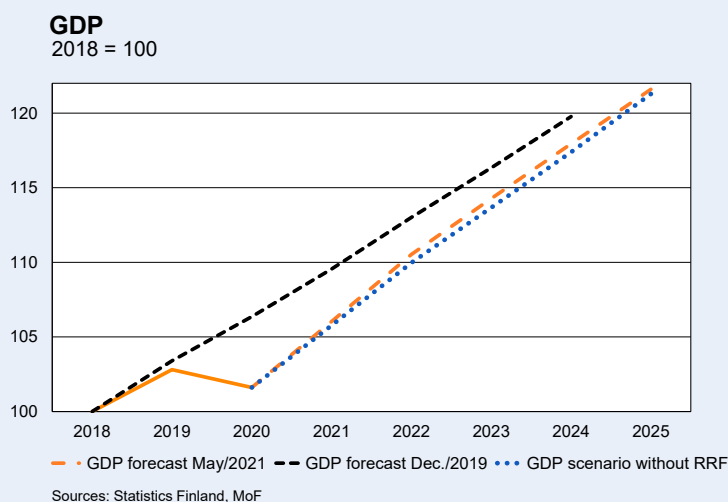
of the modelling method, in the short-term, the fiscal multiplier used in the review was close to one but it decreased over time.²

According to the calculations based on the Commission's autumn 2020 forecast, Finland is expected to receive about EUR 2.1 billion in grants from the RRF between 2021 and 2026. This is 0.84% of Finland's 2021 GDP at current prices, as projected by the Ministry of Finance in its spring forecast. Using cumulative multiplier 1, GDP can be projected to grow cumulatively by 0.8% as a result of the domestic measures funded from the Recovery and Resilience Facility between 2021 and 2026. According to current estimates, the grants would be at their highest in 2023. At that time, Finland's GDP would be 0.2% higher than in the GDP path without the Recovery and Resilience Facility. In 2021, GDP would grow about 0.1% faster than without the RRF, and in 2022, growth would be 0.1% faster. Between 2024 and 2025, as grants are reduced, GDP would grow more slowly than in the baseline scenario so that it would return to the baseline level in 2026. This estimate does not take into account the changes in the growth potential arising from possible structural changes.

The above-mentioned impact assessments concern the programme's direct impacts on domestic output. RRF-based fiscal stimulus in other EU countries might also spill over to Finland through export demand. The combined effect of the stimulus measures introduced at the same time would probably boost Finland's export demand. According to the calculations prepared in the Ministry of Finance, the impact of the RRF on Finland's GDP through growth in foreign trade would be rather modest. The strongest growth effect would be felt in 2021, when GDP growth is estimated to be almost 0.2 percentage points higher than without the Recovery and Resilience Facility. In 2022, GDP growth would still be almost 0.1 percentage points higher than without the stimulus measures, but in the following years the effects would decline. As a result of the spill-over effects, between 2021 and 2025, Finland's GDP would on average be less than 0.3% higher than without stimulus. The Recovery and Resilience Facility would have positive impacts on exports. In 2021, exports would increase by 0.8 percentage points faster and in 2022 by 0.3 percentage points faster than without the RRF. Between 2021 and 2025, exports would be slightly more than 1% higher than without stimulus.

2 In international research literature, the fiscal multiplier usually varies between 0.6 and 1 (when calculated cumulatively) but recent studies suggest that multipliers might be slightly higher when interest rates are close to zero (see for example, Ramey 2019, Amendola et al. 2020). In Finland, fiscal multiplier is estimated to average about one, though the range is substantial (see for example, Keränen and Kuusi 2016, Lehmus 2014, Mentula 2019, Viren 2017, Virkola 2014). In any case, there is significant uncertainty about the magnitude of the multiplier.

The above assessment of the spill-over effects of the Recovery and Resilience Facility is based on European Commission's estimates of its impact on European total output and the statistical models used by the Ministry of Finance Economics Department in its projections.³ Based on these scenarios, estimates derived from statistical models have been produced for this impact assessment for the volume of goods trade in the European Union, for trends in Finland's export demand and, on this basis, for Finland's exports. Based on the foreign value added of exports, the elasticity by which exports are expected to boost imports is put at 0.35. On this basis, the impact of net exports on GDP in four different scenarios can be calculated, and these scenarios are then compared against a scenario in which the effects of the RRF have not been taken into account. Based on the calculation, between 2021 and 2025 GDP will be between 0.1% and 0.3% higher than without stimulus, depending on the scenario. The scenario assuming a rapid implementation and lower effectiveness of the measures has been used as the basis for the final calculation. In this case, the average GDP between 2021 and 2025 would be less than 0.3% higher than without the Recovery and Resilience Facility.



When applying fiscal multiplier 1 to direct domestic impacts and taking into account the spill-over effects of stimulus measures introduced in other EU countries on the Finnish economy, the overall impact of the Recovery and Resilience Facility on GDP growth would be under 0.3% in 2021 and about 0.3% in 2022. At the end of 2022, GDP is projected to be 0.5% higher than in the scenario without the RRF, while at the end of 2023, it is also estimated to be 0.5% higher. As the grants decrease in both Finland and elsewhere in the

EU, GDP growth in the spring scenario would be slower than in the scenario without the RRF. Mainly due to spill-over effects, GDP in 2025 would still be about 0.3% higher than in the scenario without the RRF. The estimates become more uncertain as the time span increases. Macroeconomic impacts of the Recovery and Resilience Facility and its impacts on GDP are shown in the table and the chart.

The employment impacts of the Recovery and Resilience Facility can be estimated on the basis of employment elasticity relative to changes in GDP, the values of which generally vary between 0.4 and 0.5 depending on the estimation method and period.⁴ Assuming employment elasticity of 0.5 relative to GDP, employment in 2021 can be estimated to increase by just over 0.1% more than without RRF, while in 2022, the growth would be just over 0.1%. In 2023, the employment would be 0.3% higher than in the baseline scenario, corresponding to about 7,000 employed persons. In 2025, the number of employed persons would be about 3,000 higher. These impacts are also described in the table.

| Forecast/Spring 2021 | 2019 | 2020 | 2021** | 2022** | 2023** | 2024** | 2025** |
|---|------|------|--------|--------|--------|--------|--------|
| GDP at market price, change in volume (%) | 1.3 | -2.8 | 2.6 | 2.5 | 1.5 | 1.4 | 1.2 |
| Consumer price index, change (%) | 1.0 | 0.3 | 1.4 | 1.5 | 1.7 | 1.7 | 1.8 |
| Unemployment rate (%) | 6.7 | 7.8 | 7.8 | 7.2 | 6.9 | 6.7 | 6.5 |
| Employment rate (%) | 72.5 | 71.6 | 71.7 | 72.6 | 73.2 | 73.6 | 73.8 |
| Scenario without RRF | 2019 | 2020 | 2021** | 2022** | 2023** | 2024** | 2025** |
| GDP at market price, change in volume (%) | 1.3 | -2.8 | 2.4 | 2.2 | 1.5 | 1.4 | 1.4 |
| Consumer price index, change (%) | 1.0 | 0.3 | 1.4 | 1.5 | 1.7 | 1.7 | 1.8 |
| Unemployment rate (%) | 6.7 | 7.8 | 7.8 | 7.3 | 7.0 | 6.8 | 6.6 |
| Employment rate (%) | 72.5 | 71.6 | 71.6 | 72.5 | 73.0 | 73.4 | 73.7 |

RRF funding received by other countries

According to the above estimates, the Recovery and Resilience Facility will only have modest impacts on GDP. The overall impact generated by export demand would be slightly greater and longer-lasting than the effects arising from domestic stimulus. The domestic impact would not be substantial, as the grants

⁴ See for example, p. 52 of 'Reaalitalouden ennusteprosessi ja -menetelmät valtiovarainministeriössä' (Real economy forecasting process and methods in the Ministry of Finance). Valtiovarainministeriö 2020. <https://vm.fi/menetelmakuvaukset>

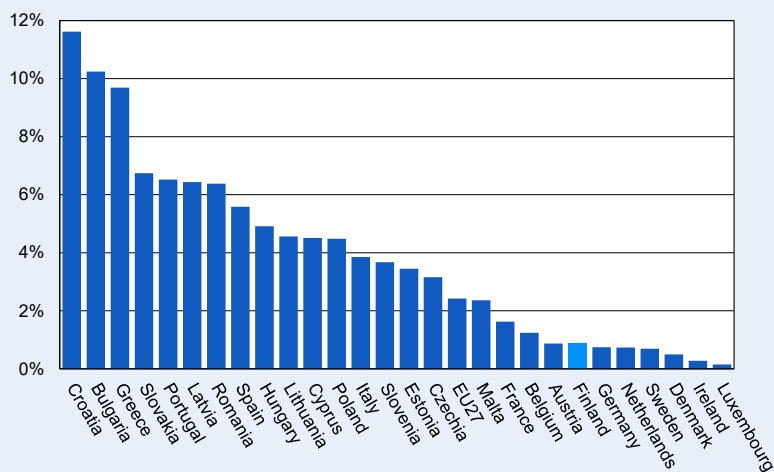
received by Finland under the Recovery and Resilience Facility are not high relative to its GDP.

Chart 2 shows the maximum amount of grants received by the EU-27 and the size of the grants relative to each country's GDP. Relative to GDP, the largest beneficiaries are Bulgaria, Croatia and Greece, and the smallest Denmark, Ireland and Luxembourg. Italy and Spain will receive the largest sums in euro terms. The largest grants go to countries that have been hardest hit by the COVID-19 pandemic and countries where the standard of living is below EU average (cohesion perspective). According to the grant allocation criteria, the grants are based on the population, GDP per capita and the unemployment rate of the Member State in the period 2015-2019 relative to the EU average, and economic growth between 2019 and 2021.

Sources

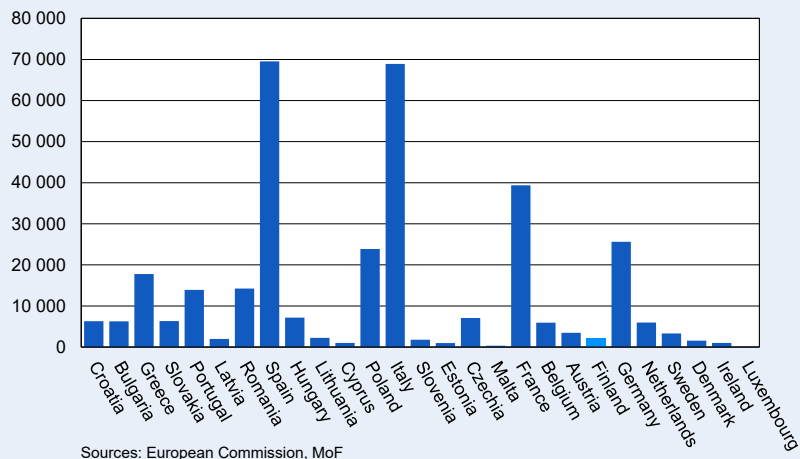
- Amendola, A., M. Di Serio, M. Fragetta, G. Melina, (2020). 'The euro-area government spending multiplier at the effective lower bound', *European Economic Review*, Volume 127, 2020.
- European Commission (2020) 'European Economic Forecast. Autumn 2020', https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/autumn-2020-economic-forecast_en.
- Keränen, H. and Kuusi, T. (2016). 'The EU's Fiscal Targets and Their Economic Impact in Finland', ETLA Working Papers 33.
- Lehmus, M. (2014). 'Finnish fiscal multipliers with a structural VAR model', *Labour Institute for Economic Research Working Papers* 293.
- Mentula, S. (2019). 'Julkisten menojen kerroinvaikutus Suomessa: Empiirinen analyysi suhdanteiden vaikutuksista kertoimen suuruuteen.' *Pro gradu -tutkielma*, Turun yliopisto.
- Ministry of Finance (2019). 'How large is the government spending multiplier?' *Economic Survey Autumn 2019*, pp. 69-72. Publications of the Ministry of Finance – 2019:50
- Ministry of Finance (2020). 'Reaalitalouden ennusteprosessi ja -menetelmät valtiovarainministeriössä'. Available: <https://vm.fi/menetelmakuvaukset>
- Ramey, V. A. (2019). 'Ten Years After the Financial Crisis: What Have We Learned from the Renaissance in Fiscal Research?', *Journal of Economic Perspectives*, 33 (2): *Journal of Economic Perspectives*, 33(2), pp. 89–114. doi: 10.1257/jep.33.2.89.
- Viren, M. (2017). 'Mihin perustuvat OECD:n elvytysuositukset?' *Kansantaloudellinen aikakauskirja*, 113. vsk, 1/2017.
- Virkola, T. (2014). 'Exchange Rate Regime, Fiscal Foresight and the Effectiveness of Fiscal Policy in a Small Open Economy' ETLA Raportit - Reports 20.

Non-repayable financial support relative to GDP in 2019



Sources: European Commission, MoF

Amount of non-repayable financial support EUR million



Sources: European Commission, MoF

1 Economic outlook

1.1 Global economy

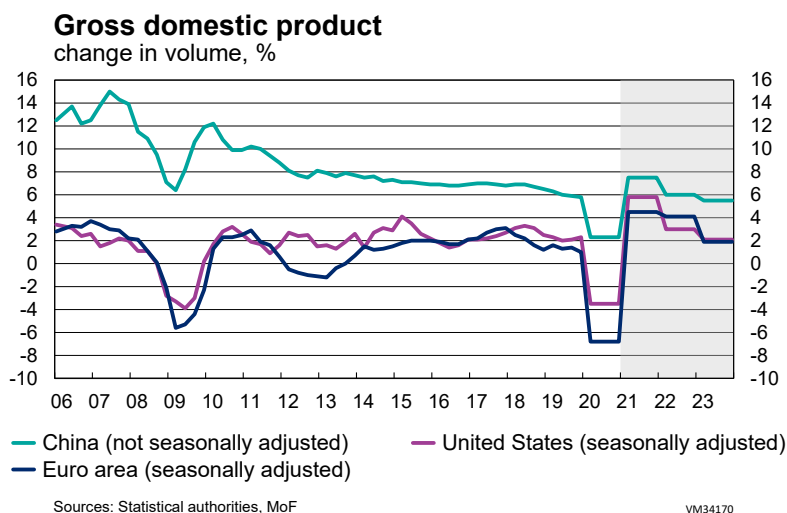
1.1.1 Global economy will recover this year

Massive stimulus packages, vaccinations and lifting of restrictions will help the world economy to recover from the downturn caused by the pandemic that broke out last year. Both the European Union and the United States have introduced massive stimulus packages. In addition to risk groups, the active population will probably also be vaccinated in major economies by next autumn. Restrictions will be gradually lifted as the pandemic eases. This year, the world economy will grow by 5.2% after contracting by 3.4% in 2020. Growth will slow down to 3.8% next year and to 3.1% in 2023.

The US economy will recover this year, thanks to rapid vaccination progress and massive monetary and fiscal stimulus. The outlook for industry and services is bright. Unemployment has decreased dramatically from the peak figures registered in spring 2020. Post-stimulus inflationary expectations have led to higher interest rates on government loans. The economy will grow at a rate of 5.8% this year and growth will slow down to 3% next year.

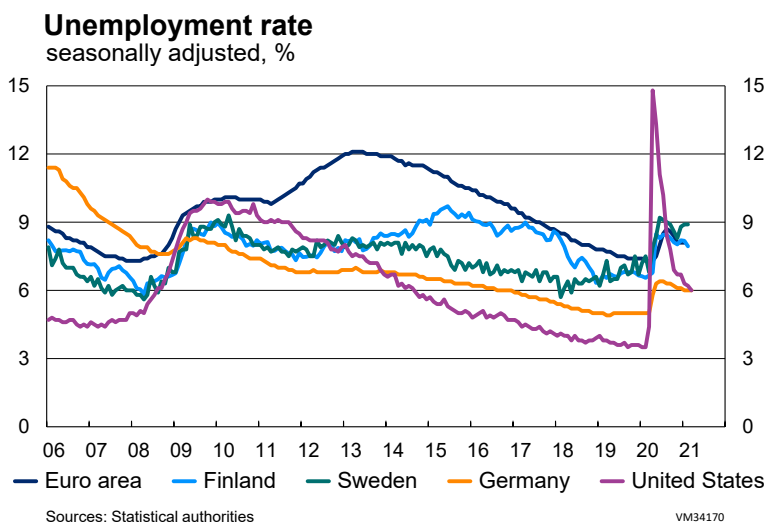
The Chinese economy grew by 2.3% last year. This was because the country was hit by the coronavirus earlier than the rest of the world and, in particular, thanks to strong exports and investments. The epidemic was rapidly quelled through strict restrictions. Total output already reached pre-crisis levels last year. The economy will grow by 7.5% this year, largely due to last year's low comparison base. Growth will settle at around 6% in 2022 and 2023.

In the euro area, the outlook for industry but also for services have improved substantially in spring 2021. The pent-up consumption is expected to be released during the year and support private consumption. The stimulus package of the EU is expected to support economic growth, especially in the period 2022-2023. ECB is continuing with stimulus measures. The euro area economy will grow by 4.5% this year. Growth will slow down to 4.1% in 2022.



The British economy will recover this year, growing at a rate of 3.2% after a historically deep downturn in 2020. Vaccinations have progressed swiftly and as a result, some of the restrictions have already been lifted. At the same time, however, the level of economic activity is slowed down by factors arising from the final withdrawal from the EU at the start of the year, such as capital flight from London, a major financial centre, and problems affecting exports to the EU. Total output growth will slow down to just under 2% next year.

Even though Sweden has been hard hit by the epidemic, its economic outlook has improved strongly. Both industrial and service sector purchasing managers' indexes suggest that growth is accelerating. Consumer confidence is strong. Total output will increase by 4.3% this year and by 2.8% next year.



The rise in oil prices and the easing of the coronavirus epidemic are giving a boost to Russia's economy. After a fall of more than 3% in 2020, the economy will recover this year, growing at a rate of 3.1%. Largely determined by structural factors, growth will continue at a more moderate rate in the coming years.

Japan experienced rapid growth in total output during the last quarter of 2020, which will support economic growth this year. The epidemic has eased during the spring. The economy will grow by 2.8% in 2021 and by 0.9% in 2022.

1.1.2 Financial markets are affected by uncertainties

Higher returns on government loans in the first months of 2021, especially in the United States and the United Kingdom, and high valuation levels in the stock markets are the key trends in the global financial markets. The expansionary monetary policy has given a substantial boost to the balance sheets of the largest central banks. Governments' and the corporate sector's indebtedness globally raises concerns. Vulnerabilities associated with these phenomena cast a shadow on real economy forecasts.

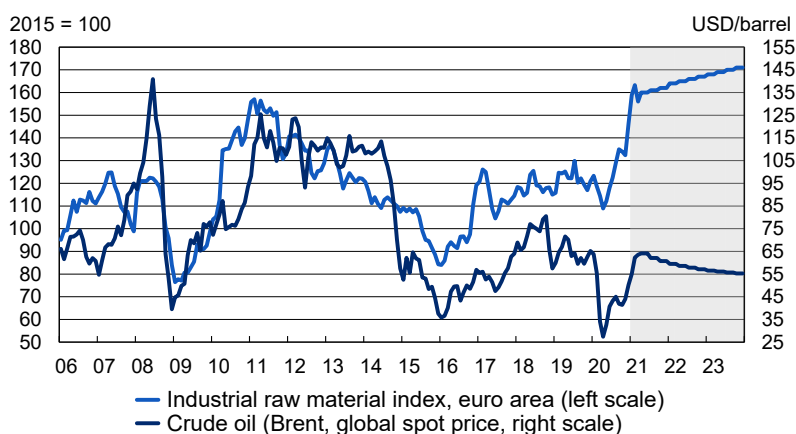
1.1.3 Inflation and long-term interest rates are on the rise

After a long period of calm, inflation has accelerated in recent months, first in the United States, and then also in the euro area. The massive fiscal stimulus in the United States has been the key factor behind this development but a rise in energy prices has also played a role. There has been a slowdown in the core inflation in the euro area. Interest rates on government loans have increased, especially in the United States, but slight increases have also been recorded in the euro area. There has been barely any increase in short-term market rates. Interest rates on government loans and short-term market rates are expected to rise moderately in the next few years as the world economy stabilises after the pandemic.

1.1.4 Rapid rise in raw material prices

Crude oil prices have been on the rise during the early months of the year as key oil producing countries extended their output restrictions. However, oil futures suggest a fall in prices in the next few years. Prices of industrial raw materials have increased dramatically, largely reflecting positive growth trends in industries. There has been a particularly rapid rise in the prices of certain metals. The growth in raw material prices will slow down but the prices will remain high in the coming years.

Raw material prices

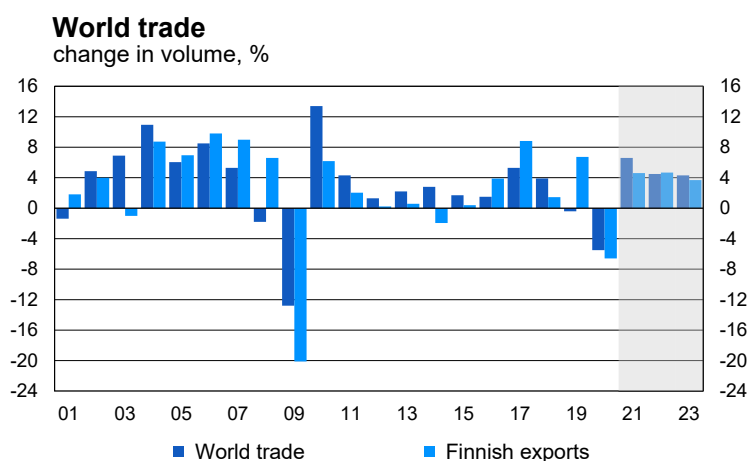


Sources: Hamburgisches WeltWirtschafts Institut, Macrobond, MoF

VM34170

1.1.5 World trade will recover and a period of rapid growth is expected

World trade contracted by 5.5% last year. Trade in goods collapsed in the second quarter during the most critical stage of the pandemic. However, world trade returned to pre-crisis levels by the end of the year, largely driven by the United States and emerging economies. World trade will grow by 6.5% this year after the collapse of 2020. The United States and the emerging economies will act as the engines for growth, while in the euro area, trade will grow at a more moderate rate. Growth in world trade will slow down in 2022 and 2023 but will continue at a relatively rapid rate.



Sources: CPB Netherlands Bureau for Economic Policy Analysis, Statistics Finland, MoF VM34170

1.1.6 Risks are skewed to the downside

The risks associated with the above forecast are still skewed to the downside. The failure of the vaccinations to prevent a surge in the pandemic is a major risk. In that case, the level of economic activity would be below the baseline scenario. Extending the restrictions beyond what has been anticipated may lead to a widespread bankruptcy wave, especially in the service sectors.

If the global vaccine distribution proceeds more rapidly than expected, the restrictions can be lifted more quickly and the level of economic activity could recover more rapidly than what is forecast in the baseline scenario.

Table 4. Gross domestic product

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--------------------|---------------------|------|------|--------|--------|--------|
| | change in volume, % | | | | | |
| World (PPP) | 3.6 | 2.9 | -3.4 | 5.2 | 3.8 | 3.1 |
| Euro area | 1.9 | 1.3 | -6.8 | 4.5 | 4.1 | 1.9 |
| EU | 2.1 | 1.6 | -6.1 | 4.2 | 3.8 | 1.9 |
| Germany | 1.3 | 0.6 | -5.3 | 4.6 | 4.2 | 2.0 |
| France | 1.8 | 1.5 | -8.2 | 4.4 | 4.0 | 1.9 |
| Sweden | 2.0 | 1.3 | -3.0 | 4.3 | 2.8 | 2.1 |
| United Kingdom | 1.3 | 1.3 | -9.9 | 3.2 | 1.9 | 1.2 |
| United States | 3.0 | 2.2 | -3.5 | 5.8 | 3.0 | 2.1 |
| Japan | 0.3 | 0.7 | -4.9 | 2.8 | 0.9 | 0.4 |
| China | 6.7 | 6.0 | 2.3 | 7.5 | 6.0 | 5.5 |
| India ¹ | 6.1 | 4.2 | -7.7 | 4.9 | 6.5 | 7.2 |
| Russia | 2.8 | 2.0 | -3.1 | 3.1 | 1.8 | 1.1 |

¹ Fiscal year

Sources: Eurostat, statistical authorities, IMF, World Bank, MoF

Table 5. Background assumptions

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|-------|-------|-------|--------|--------|--------|
| World trade growth, % | 3.9 | -0.4 | -5.5 | 6.6 | 4.5 | 4.3 |
| USD/EUR | 1.18 | 1.12 | 1.14 | 1.22 | 1.20 | 1.18 |
| Industrial raw material price index, EA, € (2015=100) | 118.5 | 122.1 | 124.7 | 160.5 | 165.5 | 169.5 |
| Crude oil (Brent), \$/barrel | 71.6 | 64.1 | 43.4 | 61.8 | 58.3 | 55.9 |
| 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 | -0.2 | -0.1 | -0.1 |
| Export market share (2010=100) ¹ | 92.9 | 99.6 | 98.5 | 96.6 | 96.9 | 96.3 |
| Import prices, % | 3.5 | 0.4 | -5.3 | 1.9 | 1.9 | 1.7 |

¹ Ratio of export growth to world trade growth

Sources: Statistical authorities, CPB, HWWI, Reuters, MoF

1.2 Foreign trade

Driven by strong growth in US foreign trade, world trade grew rapidly in the second half of 2020. Finland's foreign trade followed international trends and there was a strong growth in exports of goods and services during the last quarter of the year. In 2021 and towards the end of the forecast period, the outlook for foreign trade will also be brightened by international economic stimulus and the easing of the pandemic. However, in 2021, the COVID-19 pandemic is causing disruptions in the international economic environment. This slows down the recovery of Finland's foreign trade in some sectors but the overall outlook is positive.

1.2.1 Exports and imports

In Europe, foreign trade is expected to recover at a slower pace than world trade during the first half of 2021. As the euro area and other EU countries are important markets for Finnish products, the demand for Finnish exports will grow more slowly than world trade in 2021. However, the outlook for exports during the forecast period is good, even though the spread of virus mutations has again led to new restrictions in early 2021. The purpose of the global stimulus measures is to boost consumption and investments, and thus growth in the level of economic activity will also support Finland's foreign trade. The large savings accumulated in Finland and in other countries can be expected to be released for consumption.

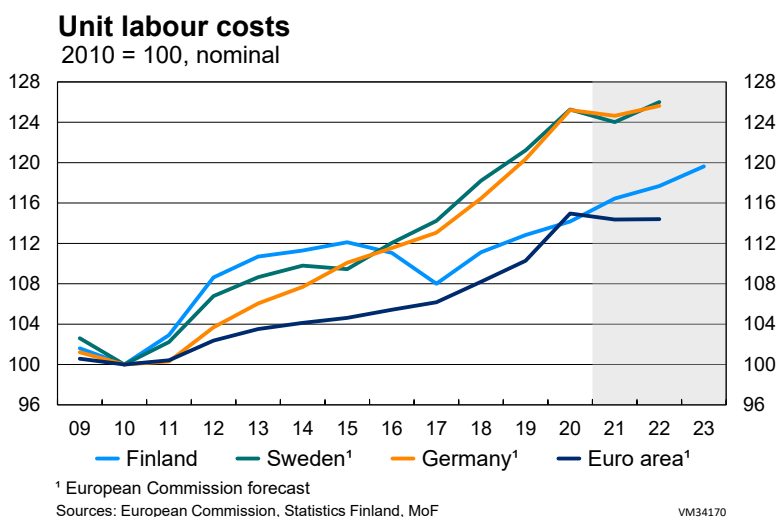
According to the latest figures, Finnish exports and imports contracted by 6.6% in 2020. The contraction of goods trade was at moderate levels, whereas exports and imports of services decreased sharply. Trade in goods will grow in 2021, although the second half of the year is expected to be the period of strongest growth. The growth in the trade in services is slowed down by the sluggish recovery of tourism and transport, but in many other areas the outlook has improved. The growth in the largest service export sectors (ICT and other business services) has been rapid since the second half of 2020. Growth in tourism and transport services depends on how rapidly the risks arising from the COVID-19 pandemic will recede.

Table 6. Foreign trade

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|-------------------------------|---------------------|------|------|--------|--------|--------|
| | change in volume, % | | | | | |
| Exports of goods and services | 1.4 | 6.7 | -6.6 | 4.6 | 4.7 | 3.7 |
| Imports of goods and services | 5.6 | 2.2 | -6.6 | 4.1 | 3.8 | 3.1 |
| | change in price, % | | | | | |
| Exports of goods and services | 4.2 | -0.3 | -4.6 | 1.8 | 1.8 | 1.6 |
| Imports of goods and services | 3.5 | 0.4 | -5.3 | 1.9 | 1.9 | 1.7 |

Driven by goods exports, the volume of exports is expected to grow by 4.6% in 2020. Strong export growth will continue in 2022 and a growth rate of 4.7% is expected. Finnish exports are expected to reach the pre-crisis levels in early 2022. The rate of export growth will slow down slightly in 2023, to 3.7%.

The volume of imports will increase by 4.1% in 2021, by 3.8% in 2022 and by 3.1% in 2023. Private consumption and industrial output will increase during the outlook period. Tourism will recover as the risks associated with the COVID-19 pandemic recede, boosting imports towards the end of the outlook period.



1.2.2 Prices and current account

Export prices decreased by 4.6% and import prices by 5.3% in 2020. Both export and import prices of goods fell sharply in the first half of 2020 and increased moderately during the last months of the year. Export and import prices of services also decreased, but the decrease was considerably less marked than in goods. Prices of industrial raw materials and crude oil have been on the rise during the early months of 2021. Export prices will increase by 1.8% and import prices by 2.0% in 2021. The growth will continue towards the end of the outlook period.

Terms of trade improved in 2020 because the prices of imported goods fell more than those of exported goods. Import prices will increase slightly faster than export prices in 2021 and 2022. According to current data, the rapid growth in export volumes at the end of 2020 boosted the surplus of goods and services. The value of both exports and imports will increase in 2021, a result of higher volumes and higher prices. The value of exports will grow faster than the value of imports in the outlook period, which will temporarily increase the current account surplus. Current account will be in surplus at the end of the outlook period.

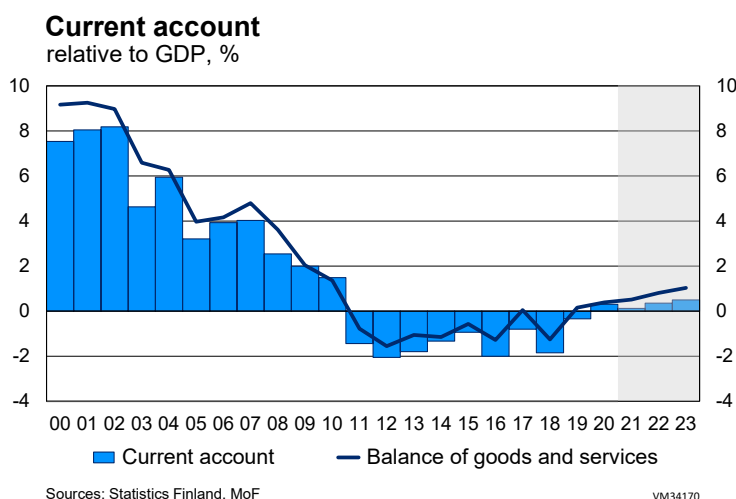


Table 7. Current account

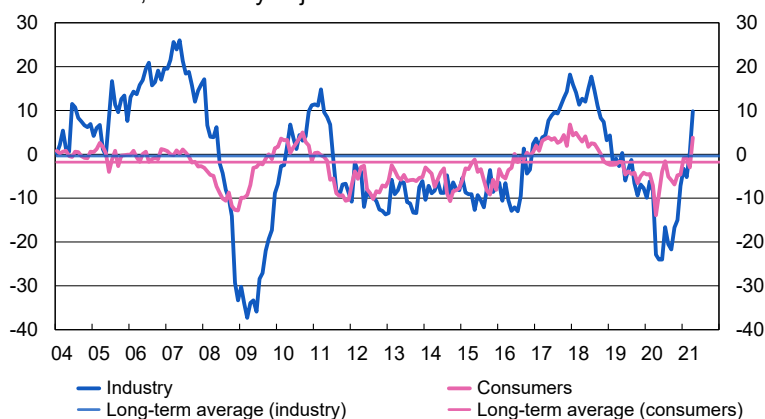
| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|--------|------|------|--------|--------|--------|
| | EUR bn | | | | | |
| Balance of goods and services | -2.9 | 0.4 | 0.9 | 1.3 | 2.1 | 2.8 |
| Factor incomes and income transfers, net | -1.4 | -1.2 | -0.2 | -1.0 | -1.2 | -1.4 |
| Current account | -4.3 | -0.8 | 0.7 | 0.3 | 0.9 | 1.3 |
| Current account, relative to GDP, % | -1.8 | -0.3 | 0.3 | 0.1 | 0.4 | 0.5 |

1.3 Domestic demand

1.3.1 Private consumption

Growth in private consumption in the fourth quarter of 2020 and in 2020 as a whole was not quite as strong as expected. Consumption of services decreased by 8% and the consumption of semi-durables by 10%. At the same time, consumption of durables and non-durable goods increased last year. Overall, private consumption decreased by 4.9% in 2020.

Industry and consumer confidence
balance, seasonally adjusted



Source: European Commission

VM34170

According to Statistics Finland's confidence survey, consumers' confidence in their own economy was twofold in early 2021: confidence in the future (12 months ahead) grew strongly, but consumers' estimate of the current state of their own economies remained at average level.

Preliminary data collected from the Incomes Register on wage bill trends suggest that in early 2021, the wage bill was almost at the same level as a year before. The volume of retail trade grew substantially in January-February year-on-year, but the first registrations of cars during the period were slightly below last year's figures.

Due to the second wave of the COVID-19 epidemic and delays in vaccinations, consumption of services is expected to remain weak throughout the first half of 2021. Foreign travel and services for sports and cultural events are expected to be the last consumption items to recover (during the second half of 2021). Recovery of services will thus be partially postponed to 2022 as consumption will increase by 4% in 2021 and 2022.

Consumption of durables is expected to increase by 6% in 2021. Growth is driven by the gradual recovery of car sales from the steep fall of 2020. Inflation will slow down to 2% in 2022.

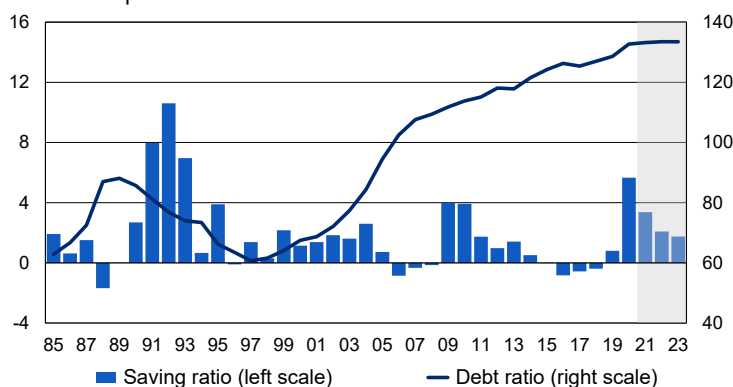
Consumption of semi-durables declined more than anticipated in 2020, as people stuck in remote work felt that they do not need new clothing or footwear. Pent-up demand will be gradually released as consumption of semi-durables will grow by 7% in 2021 and by 5% in 2022.

Growth in the consumption of non-durables will slow down to one per cent in 2021 as successful vaccination drives boost consumption of services, reducing consumption of food and electricity at home.

Private consumption will increase by 3.5% in 2021. In 2022, private consumption is expected to grow by 2.8% as consumption returns to pre-COVID-19 levels. Growth in consumption will slow down to 1.6% in 2023.

Household savings and debt

% of disposable income



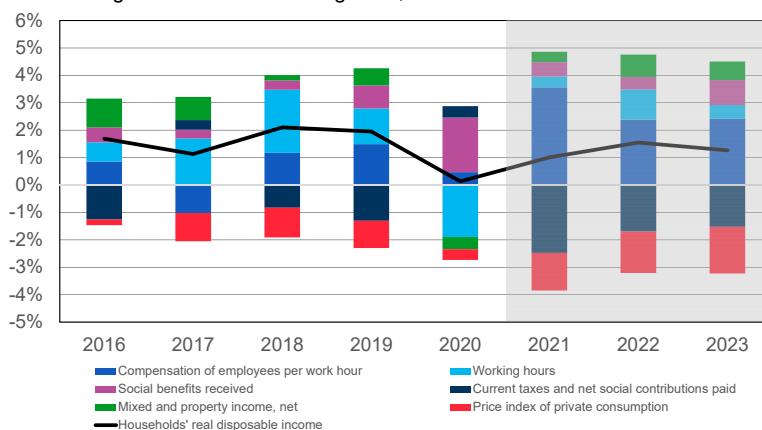
Sources: Statistics Finland, MoF

VM34170

Household savings rate increased to 5.7% in 2020. This means that Finns were saving more than at any time since the recession of the 1990s. 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.

Households' real disposable income

change and contributions to growth, %



Sources: Statistics Finland, MoF

The real disposable income, which reflects the aggregate purchasing power of households, increased by an average of just under 2% per year between 2016 and 2019. 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.

According to preliminary figures, the real disposable income only increased by 0.1% in 2020. The decrease in hours worked last year was the result of extensive lay-offs and redundancies caused by the COVID-19 epidemic.

However, considering the circumstances, household purchasing power remained surprisingly stable last year. Automatic stabilisers (increase in social security benefits and a decrease in taxes and social security contributions paid) largely compensated the decline in purchasing power caused by the fall in compensations paid to employees and property and business income.

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.

Table 8. Consumption

| | 2020 | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|-------------|---------------------|------------|-------------|------------|------------|------------|
| | share, % | change in volume, % | | | | | |
| Private consumption | 100.0 | 1.8 | 0.7 | -4.9 | 3.5 | 2.9 | 1.6 |
| Households | 95.8 | 2.0 | 0.9 | -4.9 | 3.5 | 2.9 | 1.6 |
| Durables | 8.1 | 4.4 | 3.6 | 1.5 | 6.3 | 2.1 | 3.9 |
| Semi-durables | 7.1 | 2.3 | 3.3 | -10.2 | 6.7 | 5.2 | 2.6 |
| Non-durable goods | 29.1 | 0.2 | -0.6 | 2.9 | 1.0 | 0.3 | 0.8 |
| Services | 51.5 | 2.5 | 1.3 | -8.3 | 4.1 | 4.0 | 1.6 |
| Consumption by non-profit institutions | 4.2 | -1.2 | -2.8 | -5.1 | 3.5 | 2.9 | 1.8 |
| Public consumption | | 1.8 | 2.0 | 2.3 | 2.3 | 0.0 | -1.5 |
| Total | | 1.8 | 1.1 | -2.7 | 3.1 | 2.0 | 0.6 |
| | | | | | | | |
| Households' disposable income | | 3.2 | 3.0 | 0.5 | 2.4 | 3.1 | 3.0 |
| Private consumption deflator | | 1.1 | 1.0 | 0.4 | 1.4 | 1.5 | 1.7 |
| Households' real disposable income | | 2.1 | 2.0 | 0.1 | 1.0 | 1.5 | 1.3 |
| | | % | | | | | |
| Consumption in relation to GDP (at current prices) | | 75.9 | 75.6 | 75.1 | 75.5 | 75.2 | 74.5 |
| Household savings ratio | | -0.4 | 0.8 | 5.7 | 3.4 | 2.1 | 1.8 |
| Household debt ratio ¹ | | 127.0 | 128.6 | 132.7 | 133.2 | 133.5 | 133.5 |

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 thirds 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.

According to the preliminary figures of the national accounts, public consumption increased by 4.2% in 2020. Direct additional spending allocated to the purchasing of protective equipment and other supplies required to deal with the COVID-19 epidemic and additional inputs in education and training accounted for most of the increases in consumption expenditure. Consumption expenditure was also increased by a temporary fall in sales and fee revenue caused by the epidemic and the restrictions prompted by it.

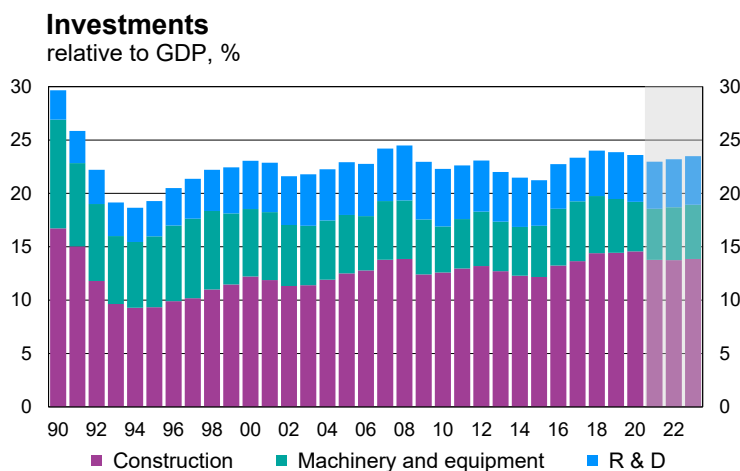
Public consumption expenditure is expected to grow at a faster rate this year. The COVID-19 epidemic and its prevention by means of testing and vaccines are significant expenditure items in general government finances. The reduction of the service and care backlog generated during the crisis is also expected to cause expenditure pressures as the epidemic eases.

In 2022, public consumption expenditure will grow more slowly as most of the additional spending prompted by the COVID-19 epidemic will expire. The value of public consumption expenditure will continue to grow in 2022 and 2023 even though the volume of consumption will no longer increase in 2022 and will decline in 2023 as the additional spending and other one-off spending increases caused by the COVID-19 crisis come to an end.

1.3.3 Private investment

Private investments declined by 4.6% in 2020. Private investments will fall by another 1.0% in 2021 due to a weak first half of the year and a decrease in construction investments. Housing construction will also decline. At the same time, there are already signs of recovery in machinery and equipment investments as the growth prospects for the global economy are improving. The investment prospects of Finnish companies are also good, and a major forest industry project will be launched during the outlook period. Funding from the Recovery and Resilience Facility of the EU will also boost private investments between 2021 and 2023. In the forecast, private investments will grow by 4.8% in 2022 and 4.2% in 2023. They will grow at an average rate of 2.7% during the outlook period and account for just over 19% of GDP in 2023.

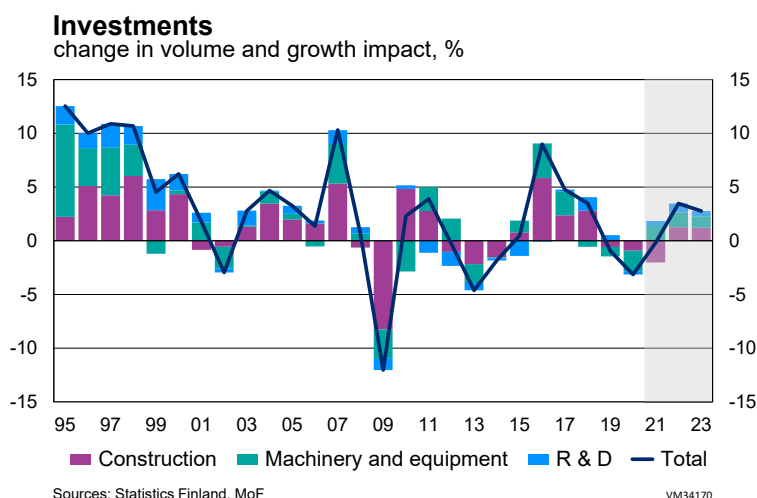
Private investments will still grow at a sluggish rate during the first half of 2021, but growth will pick up towards the end of the year. However, housing construction will decrease in 2021, as housing starts will remain below previous years' levels and they are expected to fall towards the end of the year. At the same time, moderate growth in renovation construction is expected as the need for renovation remains substantial due to the age structure of the housing stock. Grants provided from the Recovery and Resilience Facility will also be used to boost renovation construction. Housing investments will pick up in 2022. After next year, the number of housing starts will gradually approach the long-term average and an increase of 2.0% is expected in 2023.



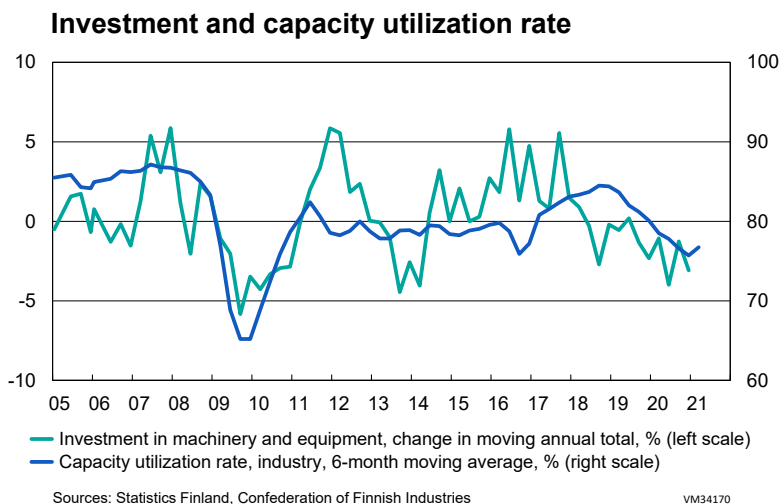
Sources: Statistics Finland, MoF

VM34170

Non-residential building construction will fall by 3% this year, as the number of new building permits and thus also building starts have been low. However, there are hopeful signs in the construction of industrial premises as according to the investment survey carried out by the Confederation of Finnish Industries, a considerable increase in industrial investments is expected this year. For example, Metsä Group is launching its bioproduct mill project in Kemi. Non-residential construction will grow by 2.6% in 2022 and 2.4% in 2023. Civil engineering investments will decrease at the beginning of the outlook period, but, boosted by infrastructure investments, they are expected to increase in 2022 and 2023. Construction investments will grow as Finland is renewing its energy infrastructure in the spirit of green transformation and in accordance with Finland's own recovery and resilience plan.



Investments in machinery, equipment and transport stock decreased by 9.1% in 2020 but will increase by 7% 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. There are also other major project plans under way in Finnish industrial companies, and the likelihood of them being launched will increase towards the end of the outlook period. Investments in machinery and equipment will grow by 6.6% in 2022 and by 5.0% in 2023. Research and development investments will grow throughout the outlook period. They will also be generously supported from such sources as the Recovery and Resilience Facility.

**Table 9.** Fixed investment by type of capital asset

| | 2020 | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|--------------|---------------------|-------------|-------------|-------------|------------|------------|
| | share, % | change in volume, % | | | | | |
| Buildings | 52.9 | 5.7 | -0.2 | -2.0 | -3.6 | 2.1 | 2.2 |
| Residential buildings | 29.9 | 4.5 | -4.1 | -2.0 | -4.0 | 1.7 | 2.0 |
| Non-residential buildings | 23.0 | 7.4 | 5.5 | -1.9 | -3.0 | 2.6 | 2.4 |
| Civil engineering construction | 8.8 | 0.0 | -5.2 | 1.2 | -1.5 | 2.2 | 1.3 |
| Machinery and equipment | 19.7 | -2.3 | -4.0 | -9.1 | 7.0 | 6.6 | 5.0 |
| R&D-investments ¹ | 18.6 | 7.2 | 2.9 | -1.7 | 2.5 | 4.3 | 2.5 |
| Total | 100.0 | 3.5 | -0.9 | -3.1 | -0.2 | 3.5 | 2.8 |
| Private | 80.6 | 3.0 | -1.6 | -4.6 | -1.0 | 4.8 | 4.2 |
| Public | 19.4 | 6.0 | 2.3 | 3.4 | 3.3 | -2.0 | -3.4 |
| | | % | | | | | |
| Investment to GDP ratio (at current prices) | | | | | | | |
| Fixed investment | | 24.0 | 23.9 | 23.6 | 23.0 | 23.2 | 23.5 |
| Private | | 19.7 | 19.5 | 19.0 | 18.3 | 18.8 | 19.3 |
| Public | | 4.3 | 4.4 | 4.6 | 4.6 | 4.4 | 4.2 |

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 and central government a little less than a half. 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 the 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 larger 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, they are expected to remain at high level in 2021. Public investments will decrease slightly in 2022 but will still remain at a high level.

Slow growth in public investments is expected at the end of the outlook period. In 2023, central government funding for transport infrastructure will decrease, and local government investments will be reduced by a slowdown in hospital construction.

1.4 Domestic production

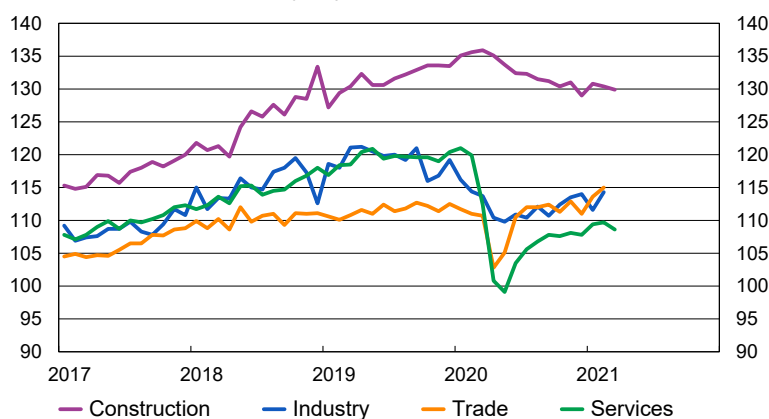
1.4.1 Total output

Finland's gross domestic product contracted by 2.8% in 2020 as a result of the COVID-19 pandemic. Production value added decreased by 2.7% in the same period. Service production was the sector hardest hit by the pandemic as its value added fell by 3% year-on-year. Accommodation, catering and transport were the sectors posting the steepest decreases. There was a dramatic fall in public sector service production in the second quarter of last year, which kept the level for the whole of 2020 about 2% lower than in 2019.

Primary production was hit by an exceptionally poor grain harvest and the forest industry strike at the start of the year, which caused a decrease in the demand for wood. Industrial production also decreased on a broad front. There was also a decline in construction even though the fall was not as steep as in the other main sectors. Unlike other main sectors, in which turnover collapsed in spring 2020, turnover of construction companies was only slightly affected by the epidemic. As a result of successful monetary and fiscal stimulus, economic output suffered much less than feared: for example, the number of bankruptcies actually decreased last year compared with 2019.

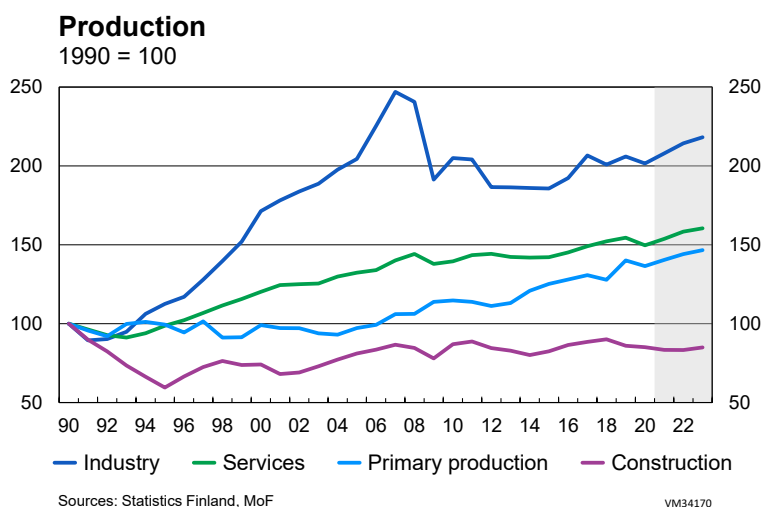
Turnover trends in main sectors

2015 = 100, seasonally adjusted



Source: Statistics Finland

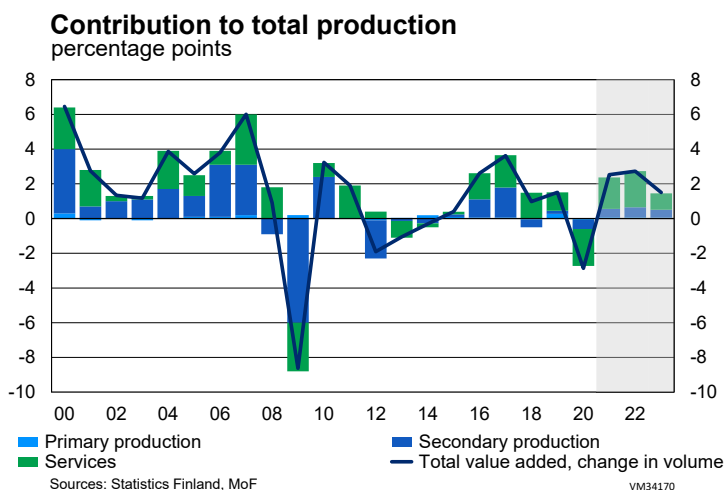
The starting point for economic growth this year is now both better and weaker compared with the situation at the end of 2020. The worsening COVID-19 epidemic posed new challenges in terms of demand for and supply of services. Number of new orders is partly low, which will slow down the recovery of industrial production. Insufficient demand remains the most serious obstacle to business growth. The Recovery and Resilience Facility of the EU is an instrument designed to respond to this challenge and its aim is to boost demand and investments on a broad front. The demand for Finnish exports is expected to grow more rapidly in 2022 and 2023 than previously forecast. Expectations in individual sectors are also more optimistic even though there was a slight increase in pessimism in February and March. According to the business tendency survey conducted by the Confederation of Finnish Industries, expectations in industrial companies are already optimistic. In the construction and service sectors, expectations are still slightly weak, but the latest data show more optimism than before.



Industrial production already increased during the last months of 2020. Despite weak expectations, there was no contraction in construction during the last quarter of 2020. However, the growth rate of services slowed down substantially again during the last months of 2020.

According to the forecast, economic growth would be at its fastest in the third quarter of 2021. This is because it is estimated that demand for accommodation, catering and transport services will increase rapidly during those months. The growth in 2021 will be reduced by a decline in construction, although the strong performance of the housing construction sector has prompted an upward revision of the forecast. The civil engineering sector will slow down this year and its performance for the whole of 2021 is expected to fall by a few per cent from last year. Finland's gross domestic product is expected to increase by 2.6% in 2021.

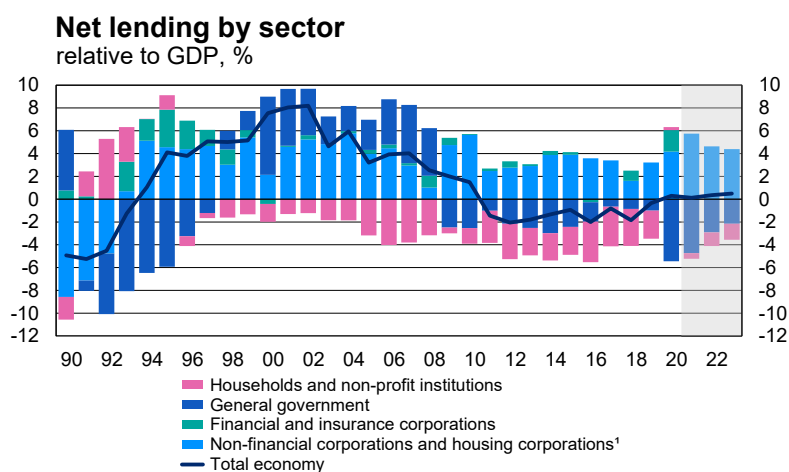
The increase in GDP caused by a substantial acceleration of economic growth in 2021 will also spill over to 2022. Boosted by higher export demand, growth in household consumption and domestic investments, Finnish economy will grow at a rate of 2.5% in 2022. In 2022, GDP will already be higher than in 2019. In 2023, the Finnish economy will return close to its long-term average growth rate, while the output gap will gradually close.



Services account for 70% of Finland's economic output. They were the main factor behind economic contraction in 2020 and the economic growth after that.

Economic productivity per hours worked decreased by one per cent last year because the value of production declined more than the hours worked. Productivity per employed person decreased slightly more. In 2021, the productivity of the Finnish economy per hours worked will increase by about 2%, after which annual productivity growth will gradually slow down to one per cent in 2023.

Despite weak expectations, the operating surplus increased last year. In the next few years, it is expected to grow more rapidly, at a rate of between four and five per cent. Unit labour costs in Finland will increase at an average rate of about 1.6% between 2021 and 2023.



1) Including financial sector in 2021-2023

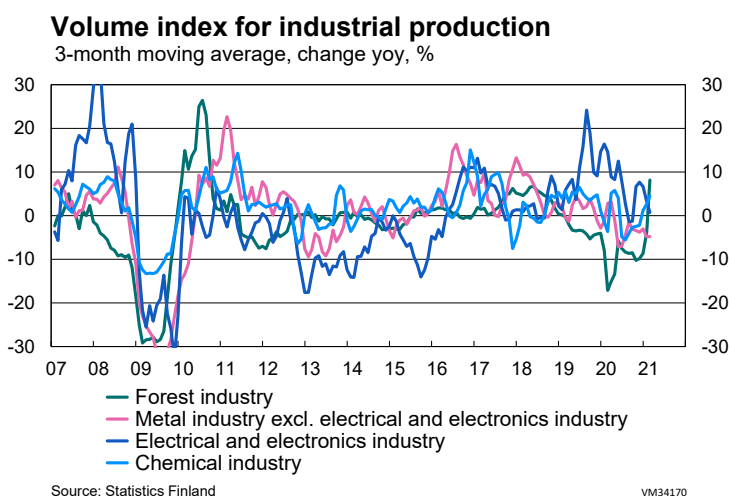
Sources: Statistics Finland, MoF

VM34170

1.4.2 Secondary production

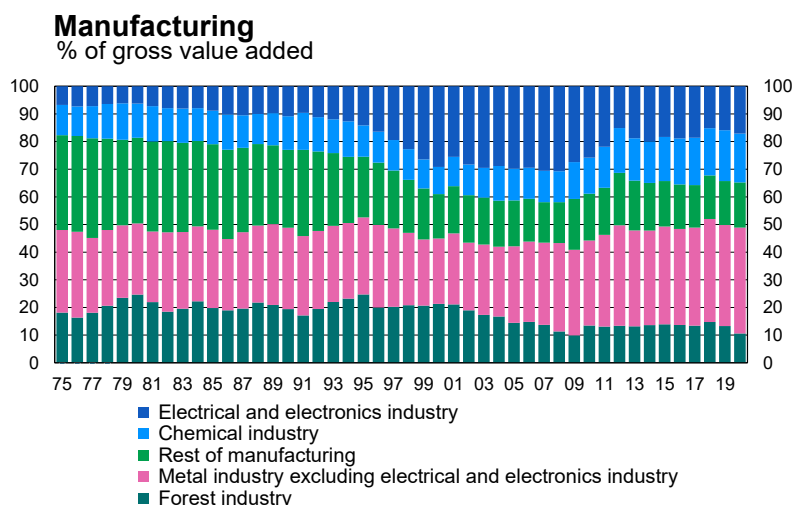
Industrial production has grown since the third quarter of 2020 and decreased by only 2.2% last year. However, there were substantial differences between sectors. The forest industry contracted by more than 10%, while the electrical and electronics industry grew by almost 7%. Sharp fall in the demand for paper products and the closure of several paper machines were the main factors behind the poor performance of the forest industry. The metal industry contracted by more than 3%, whereas in the chemical industry the decrease was only 1.4%. Energy, water and waste services also contracted by 1.3% year-on-year.

Finland's industrial output is expected to grow by 3.2% in 2021. The first half of the year will be slightly weaker than what was anticipated in previous forecasts, as the rolling three-month value of new industrial orders will still be around 3% lower year-on-year. Of the main industrial sectors, the metal industry has the weakest order backlog, while the chemical industry has recorded a strong two-digit increase in orders.



The expectations of the sectors have turned positive, and according to the January business tendency survey, all main industrial sectors (forest, chemical and metal industries) expected growth throughout the first half of the year in 2021. In the largest ever industrial project in Finland, the Metsä Group will build a bioproduct mill in Kemi in the next few years. The mill is expected to come on stream in 2023.

The metal industry accounts for most of the industrial value added. The chemical industry is the second largest industrial sector and accounts for half of the size of the metals industry.



Source: Statistics Finland

VM34170

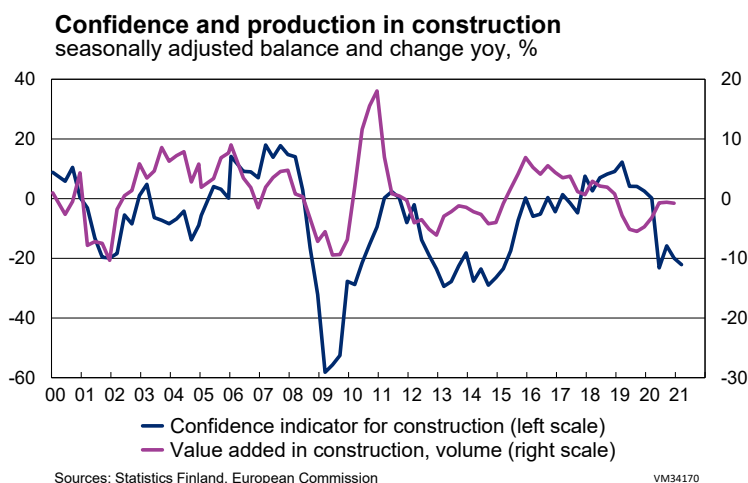
Growth in the manufacturing industry will accelerate further in 2022, as the demand for Finnish industrial products in Europe and the United States is expected to increase. Most of the industrial output is exported. In the last year of the forecast, the growth rate of industrial production will slow down and approach the long-term average.

Construction

Construction decreased by only a bit more than one per cent last year. The COVID-19 epidemic reduced renovation construction but it had little impact on new construction. The number of all building starts increased by 4% last year. Sales of homes were brisk and more housing loans were taken out than in the previous year. Housing starts actually increased from the previous year, totalling 40,000. The measures taken by the Government to stimulate the sector by increasing state-subsidised housing construction was one factor contributing to the higher figure. There was also a significant increase in infrastructure construction last year.

The expectations of the construction sector for the first half of this year remain weak and reflect the lower number of building permits. At the end of last year, the annual total of building permits was 12% lower year-on-year. It is assumed in the forecast that interest rates will remain low, which will keep the Finnish housing market attractive to both owner-occupiers and real estate investors. However, the strong increase in rental housing supply in recent years will gradually reduce housing starts. In 2021, the number of housing starts is expected to decline from 2020 but it will remain at a high level, at about 36,000 dwellings. The number of housing starts in 2022 is estimated at about 33,000, and in 2023 between 31,000 and 32,000.

The construction is almost evenly divided between renovation and new construction. The rate of growth in renovation construction remained very low last year. However, this year, a substantial increase in housing company renovation projects is expected as the COVID-19 vaccination drive is completed. Renovation construction is expected to increase by about 1.5% this year and by 2% in 2022 and 2023.



Non-residential building construction will decline this year. A substantial decrease in new starts is expected as there has been a strong downward trend in the number of building permits. Utilisation rates of commercial premises have decreased as a result of the COVID-19 epidemic. The impact may be long-lasting, as interest in remote work has increased, and at the same time, companies have noted the potential for savings in real estate expenses. Despite this, commercial 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.

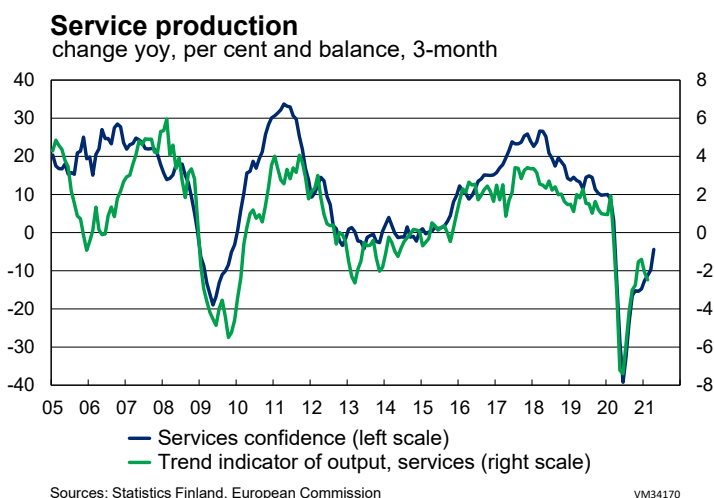
Despite expectations, the growth in civil engineering construction recorded in national accounts remained modest even though turnover and sales in the sector increased substantially. This year, civil engineering construction will contract slightly, as many of the stimulus projects have been completed and the increase in transport infrastructure spending introduced last year is now included in this year's figures. The stimulus package of the European Union will create demand for civil engineering construction in the next few years.

In 2021, construction as a whole will decrease by just under two per cent. In particular, the long period of rapid growth in the construction of public service buildings now seems to be over. In 2022, construction will pick up even though it will still remain at the level of 2021. In 2023, growth rate will be slightly above long-term growth.

1.4.3 Services

Service production decreased in both private and public sectors last year. Accommodation and catering services fell by almost half in 2020 year-on-year. Performance of the transport sector decreased by 20% and other services by more than 10% last year. At the same time, information and communication services grew by 2% last year, and slight growth was also recorded in financing and insurance activities and the real estate sector. Retail trade has performed significantly better than the other service sectors and speciality stores.

According to the business tendency survey, service sectors only expect growth to resume in the second quarter. However, financing and insurance services, as well as information and communication companies expect to grow throughout the first half of the year. The business confidence indicator has followed the service output trend indicator quite accurately.



The increase in industrial production and household consumption will also boost growth in services. 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 2.6%. Growth will slow down in 2022, but a growth spillover will keep growth at 3%. Some of the growth in accommodation services and transport will come with a delay and will thus lengthen the period of growth. In 2023, growth will slow down and return close to its long-term average.

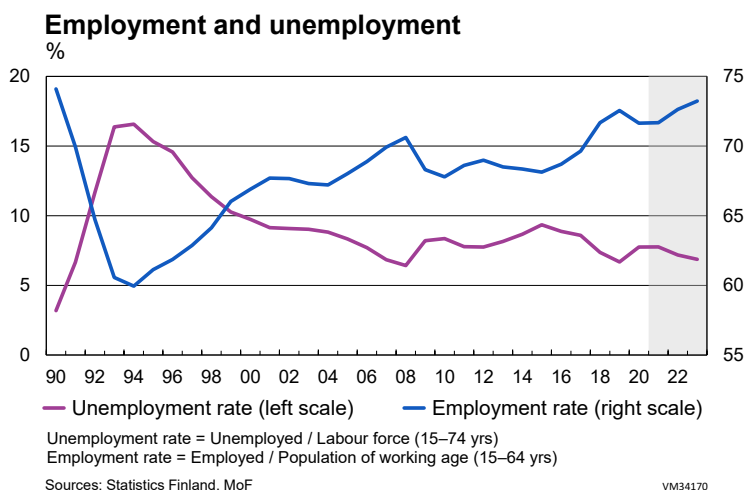
Table 10. Production by industry

| | 2020 | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|--------------------------|---------------------|------|------|--------|--------|--------|
| | share, % ¹ | change in volume, % | | | | | |
| Industry | 19.3 | -2.8 | 2.6 | -2.2 | 3.2 | 3.0 | 1.8 |
| Construction | 8.0 | 1.9 | -4.5 | -1.3 | -1.8 | 0.0 | 1.9 |
| Agriculture and forestry | 2.8 | -2.3 | 9.6 | -2.5 | 2.9 | 2.6 | 1.7 |
| Industry and construction | 27.2 | -1.6 | 0.7 | -1.9 | 1.8 | 2.1 | 1.9 |
| Services | 69.9 | 2.1 | 1.5 | -3.0 | 2.6 | 3.0 | 1.4 |
| Total production at basic prices | 100.0 | 1.0 | 1.5 | -2.7 | 2.4 | 2.7 | 1.5 |
| GDP at market prices | | 1.3 | 1.3 | -2.8 | 2.6 | 2.5 | 1.5 |
| Labour productivity in the whole economy | | -1.3 | 0.2 | -0.8 | 2.0 | 1.6 | 1.0 |

¹ Share of total value added at current prices

1.5 Labour force

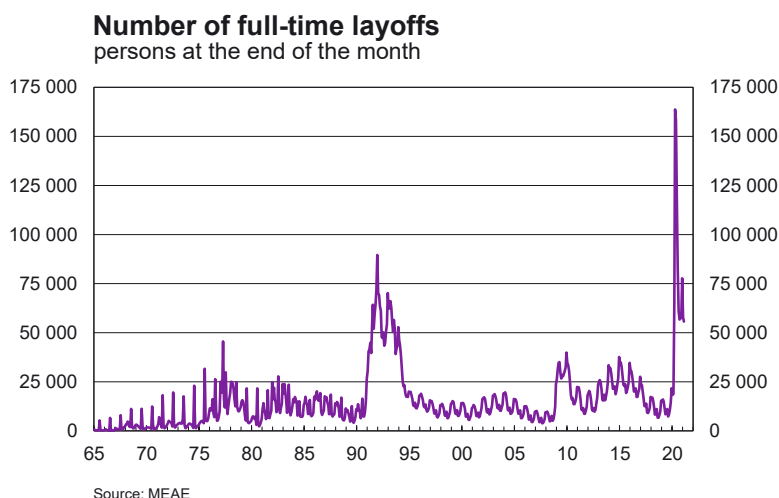
The employment rate decreased substantially last year. The four-year growth in employment came to an end and the employment rate fell by one percentage point, to 71.6%. The number of employed persons was 38,000 lower than in 2019. The number of wage-earners decreased by 1.4% and the number of entrepreneurs by 1.9%. While the number of full-time employees increased, there was a decrease in the number of part-time and fixed-term employees. In addition to the reduction in the number of employed persons, the number of underemployed persons, who are willing to work more hours, increased by 45,000, and the number of hidden unemployed, who no longer seek work, increased by 25,000. The number of hours worked decreased by 1.9%. The fall in employment was sharpest in the accommodation and catering sector, retail trade and in social services. Energy services, certain business service sectors and public administration recorded the highest increases in employment.



The rapid spread of COVID-19 during the early months of the year will dampen demand for labour, especially in the service sector. Contraction of construction activities will also impact employment in secondary production. Due to the precarious economic situation, the labour market does not yet attract labour and the number of people outside the labour force increased by 1.1% last year. There was further fall in the demand for labour in early 2021 and there are not yet any clear signs of a turn for the better. According to business confidence surveys,

employment expectations have risen in industrial companies during the winter months. In the construction and service sectors, employment expectations are well below average. However, work opportunities are still available. There were 33,400 job vacancies in the fourth quarter, which was only a slightly decline year-on-year.

Last year, companies adjusted their labour costs through redundancies and lay-offs. The number of laid-off employees was particularly high in the service sector. The number of laid-off employees decreased rapidly from record levels in summer, but the number was still at nearly 60,000 in the autumn. Moreover, the number of lay-offs started in January-February 2021 was higher than last year, unlike the number of new periods of unemployment.



The new restrictions introduced following an increase in the number of new COVID-19 cases will mainly impact the demand for and supply of services and reverse the positive trend in employment. Once the disease is under control, economic recovery will also increase the demand for labour. Growth in employment may be quite rapid. Because of a fall during the first months of the year, employment is only expected to grow by 0.1% in 2021. With a decline in the working-age population, the employment rate will reach 71.7%.

Economic recovery will pick up speed in 2022 and 2023, especially in the service sectors. The number of employed persons is expected to increase by just over one percent in 2022. Growth will slow down in 2023 as the level of economic activity decreases. The number of employed persons will only exceed the 2019 levels in 2023 when the employment rate will increase to just over 73%.

The fall in employment last year led to a rapid rise in unemployment. According to Statistics Finland, the number of unemployed was 29,000 higher than in the previous year, and the unemployment rate rose to 7.8%. There was a particularly steep rise in unemployment among young men and women. Moreover, only a small proportion of the laid-off employees were recorded as unemployed and the number of hidden unemployed people who are outside the workforce and no longer seeking work increased almost as much as the number of unemployed. According to the register data of the Ministry of Economic Affairs and Employment, there has been a substantial increase in both cyclical and structural unemployment and a particularly steep rise in long-term unemployment.

According to the trend, the number of unemployed is now on a slight rise, and the increase may well continue after the coronavirus epidemic has worsened this spring. Redundancies and lay-offs will increase as a result of uncertainty, restrictions and bankruptcies. There will not be any decrease in unemployment in 2021 as the economy will not fully recover until the second half of the year, and the recovery of the labour-intensive service sectors in particular will only pick up next year. Unemployment will fall more substantially in 2022 and 2023 as the economy recovers from the epidemic and restrictions. In 2023, the unemployment rate will fall below 7%, which is slightly more than the structural unemployment rate in Finland estimated using the method jointly developed by the EU Commission and the Member States.

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 | 4133 | 4123 | 4111 |
| change | 10 | 4 | 5 | 0 | -10 | -12 |
| Population of working age (15–64 yrs) | 3439 | 3428 | 3421 | 3421 | 3416 | 3410 |
| change | -12 | -11 | -7 | 0 | -5 | -6 |
| Employed (15–74 yrs) | 2540 | 2566 | 2528 | 2530 | 2559 | 2575 |
| of which 15–64 yrs | 2465 | 2487 | 2451 | 2452 | 2481 | 2497 |
| Unemployed (15–74 yrs) | 202 | 184 | 213 | 213 | 198 | 190 |
| | % | | | | | |
| Employment rate (15–64 yrs) | 71.7 | 72.5 | 71.6 | 71.7 | 72.6 | 73.2 |
| Unemployment rate (15–74 yrs) | 7.4 | 6.7 | 7.8 | 7.8 | 7.2 | 6.9 |
| | 1,000 persons per annum | | | | | |
| Immigration, net | 16 | 18 | 19 | 17 | 17 | 17 |

1.6 Incomes, costs and prices

1.6.1 Wages and salaries

The rate of nominal wage increases slowed down from 2.1% in 2019 to 1.8% in 2020. The slowdown was due to lower negotiated pay rises as wage drifts increased. Despite a highly exceptional year, companies paid more performance bonuses last year than in 2019. Partially as a result of the reinstatement of the holiday bonuses after summer 2019, public sector earnings rose at a slightly faster rate than earnings in the private sector. In industries, retail trade, financing and insurance, nominal wages grew at a slightly faster rate than in 2019. However, in many service sectors (particularly in education and health and social services), wage growth slowed down. Real wage growth accelerated to 1.5% as inflation slowed down by more than half a percentage point year-on-year.

In many sectors, nominal wages specified in collective agreements will be increased in the first half of 2021. The private and public sector wage rises agreed for 2021 are about 0.5 percentage points higher than in 2020. Higher level of economic activity

and the resulting rise in employment will probably lead to higher wage drifts. Nominal earnings would thus increase by 2.7% in 2021. No contractual increases have been agreed for next year, as most collective agreements will expire in late 2021 or early 2022. The forecast assumes that the increase in earnings for 2022 and 2023 will be linked to the predicted slower growth in productivity. Thus, the increases specified in collective agreements would not be higher than in 2021, which means that nominal earnings would increase by 2.5% in 2022 and 2023.

The wage bill decreased by only 0.4% last year, even though employment declined by 1.5% and the growth rate of nominal earnings slowed down. This is partly due to the redundancies and lay-offs, which targeted young age groups and persons with lower than average pay levels. In addition to nominal earnings, the wage bill is also affected by employment trends. As employment will change little from last year, the increase in the wage bill in 2021 is largely based on growth in nominal earnings and the wage bill is expected to increase by 3%. Although the increase in earnings is slowing down, the growth in employment will boost the increase in the wage bill in 2022 and 2023, when the wage bill is expected to increase by more than 3% annually.

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 | 2.0 | 1.8 | 1.8 |
| Wage drift, etc. | 0.5 | 0.1 | 0.5 | 0.7 | 0.7 | 0.7 |
| Index of wage and salary earnings | 1.7 | 2.1 | 1.8 | 2.7 | 2.5 | 2.5 |
| Real earnings ¹ | 0.6 | 1.1 | 1.5 | 1.3 | 0.9 | 0.8 |
| Average earnings ² | 2.2 | 2.0 | 1.1 | 2.6 | 2.6 | 2.6 |
| Labour costs per unit of output whole economy ³ | 2.9 | 1.5 | 1.2 | 2.0 | 1.1 | 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.

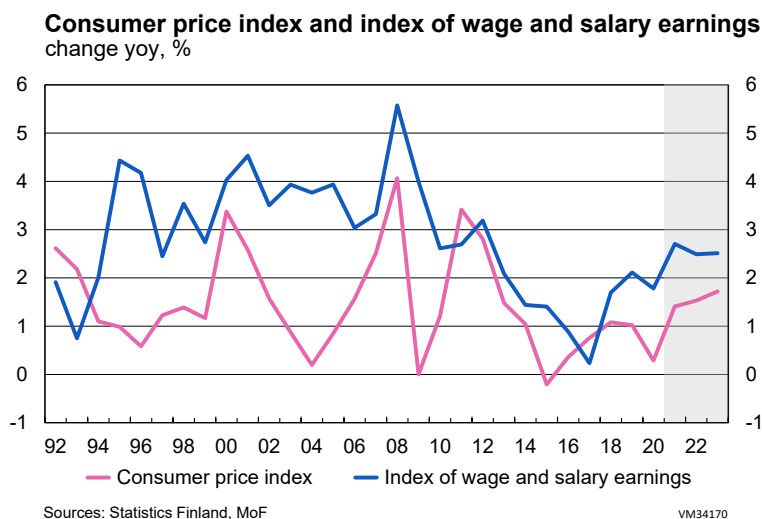
³ Compensation of employees divided by gross value added in volume at basic prices.

1.6.2 Consumer prices

The consumer price index has increased by almost 1% in the first months of 2021. The price of energy is already on the increase and it no longer plays any role as a factor slowing down inflation. The rise in service prices has accelerated, but service inflation has remained slower than average. The rise in food prices has slowed down and fresh food prices even decreased in the early months of 2021.

Measured with the national consumer price index, an inflation rate of 1.4% is forecast for 2021. The rise in oil prices will cause energy prices to increase substantially during the year. The rise in service prices will gradually accelerate. The baseline inflation will also remain positive.

Weak demand and general uncertainty will also keep inflation down during the first half of 2021. As the economy is bouncing back, a moderate rise in consumer prices is expected. The rise in wages is more clearly reflected in the prices of services and further in consumer prices. The national consumer price index is expected to rise by 1.5 % in 2022 and by 1.7% in 2023.



Consumer price index

percentage change and contribution to change

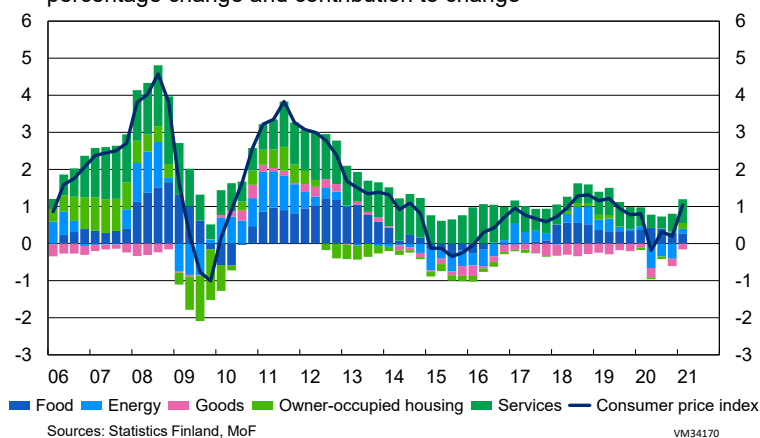


Table 13. Price indices

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|-----------|------|------|--------|--------|--------|
| | change, % | | | | | |
| Export prices ¹ | 4.2 | -0.3 | -4.6 | 1.8 | 1.8 | 1.6 |
| Import prices ¹ | 3.5 | 0.4 | -5.3 | 1.9 | 1.9 | 1.7 |
| Consumer price index | 1.1 | 1.0 | 0.3 | 1.4 | 1.5 | 1.7 |
| Harmonised index of consumer prices | 1.2 | 1.1 | 0.4 | 1.5 | 1.7 | 1.9 |
| Basic price index for domestic supply, including taxes | 4.7 | 1.0 | -3.3 | 2.7 | 1.9 | 2.2 |
| Building cost index | 2.2 | 1.0 | -0.2 | 1.7 | 1.8 | 2.1 |

¹ As calculated in the National Accounts

2 General government finances

2.1 General government

Finland's general government deficit reached substantial proportions last year due to the COVID-19 epidemic. General government finances were weakened by an economic downturn and the support measures prompted by the epidemic. Even though the Finnish economy will recover this year, general government deficit will remain high. This year, too, the discretionary fiscal policy will support growth. Economic growth will support general government finances in the coming years but the deficit will remain higher than in the pre-crisis period. There is a structural imbalance between expenditure and revenue in general government finances.

General government debt increased in 2020 and the debt ratio is now almost 10 percentage points higher than before the crisis. Even though the debt ratio will grow more slowly in the coming years it is expected to be over 75% in the mid-2020s. The general government debt-to-GDP ratio will remain at a significantly higher level than before the crisis.

The contributions of the Recovery and Resilience Facility (RRF) are included in the projection for general government finances. The expenditure increases are neutral in respect of the general government budgetary position as the assumption in the forecast is that the revenue matches the expenditure. Most of the measures are expected to take place in the period 2022-2023. RRF is described in more detail in the box on page 24 and in Finland's national recovery and resilience plan (RRP), to be presented in May.

Central government has borne most of the expenses of the support measures prompted by the coronavirus epidemic. It has provided municipalities and social security funds with financial support to alleviate the adverse impacts of the epidemic on their activities. In fact, central government was the general government sector posting the highest deficit last year. 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 71. Central government deficit will narrow slightly as a result of economic growth, but it will nevertheless remain substantial.

Local government budgetary position turned into a surplus last year, which was largely the result of massive central government support measures and the savings generated by municipalities. Next year, local government deficit will grow again. 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 as a result of the ageing population. The wellbeing services counties will start with a slight deficit caused by sizeable investments.

Last year, the surplus of employment pension institutions decreased significantly due to the temporary reduction in employment pension insurance contributions, and a fall in contribution and property income. While the financial position of the employment pension institutions will improve, their surpluses will remain moderate in the coming years as pension expenditure continues to grow and the 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. This year, the situation of the other social security funds is eased by an increase in the unemployment insurance contribution and a reduction in the number of laid-off employees. Unemployment is also expected to fall later during the outlook period, 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 come to an end 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. There will be both tax increases and tax cuts during the outlook period; however, as especially indirect taxes will rise more slowly than GDP, the tax rate will decline.

The most important risks affecting general government finances are still related to overall economic developments. Possible new waves of the epidemic, as well as the reintroduction of extensive restrictions may slow down the economic recovery and weaken public finances, both through slower economic growth and new support measures.

General government contingent liabilities and especially the rapid rise in guarantees will pose a risk for general government finances. Concentration of the guarantee liabilities in a small number of sectors and companies is increasing the risks arising from the liabilities. Guarantee authorisations were also increased in 2020 as part of the measures introduced to support companies. Extensive realisation of the liabilities would lead to higher public spending and speed up the increase in the debt-to-GDP ratio.

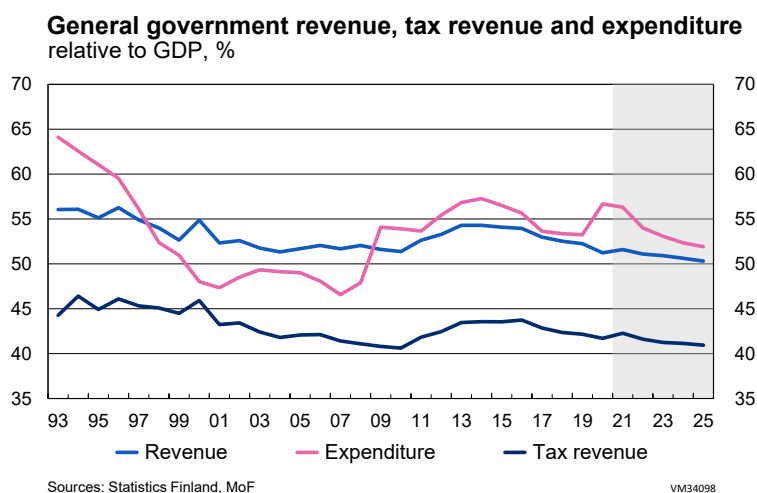


Table 14. General government finances¹

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| | EUR billion | | | | | |
| Current taxes | 37.4 | 38.4 | 37.7 | 39.2 | 40.6 | 41.5 |
| Taxes on production and imports | 33.0 | 33.6 | 32.9 | 34.5 | 35.0 | 35.7 |
| Social security contributions | 27.9 | 28.6 | 27.6 | 30.1 | 31.0 | 32.2 |
| Taxes and contributions, total ² | 99.0 | 101.3 | 99.0 | 104.7 | 107.5 | 110.2 |
| Other revenue ³ | 24.4 | 25.0 | 23.4 | 24.0 | 25.3 | 26.7 |
| of which interest receipts | 1.7 | 1.6 | 1.4 | 1.2 | 1.4 | 1.4 |
| Total revenue | 122.7 | 125.5 | 121.7 | 127.8 | 132.0 | 136.0 |
| Consumption expenditure | 53.5 | 55.8 | 58.1 | 61.0 | 62.3 | 62.8 |
| Subsidies | 2.6 | 2.6 | 4.2 | 4.1 | 2.8 | 2.9 |
| Social security benefits and allowances | 43.0 | 43.8 | 46.3 | 46.9 | 47.5 | 48.6 |
| Other current transfers | 5.6 | 5.7 | 6.6 | 6.6 | 6.6 | 6.6 |
| Subsidies and current transfers, total | 51.2 | 52.1 | 57.1 | 57.6 | 56.9 | 58.1 |
| Capital expenditure ⁴ | 10.3 | 10.9 | 11.1 | 12.8 | 12.2 | 12.1 |
| Other expenditure | 9.8 | 9.1 | 8.3 | 8.2 | 8.1 | 8.7 |
| of which interest expenses | 2.1 | 2.0 | 1.6 | 1.2 | 1.0 | 0.9 |
| Total expenditure | 124.7 | 127.9 | 134.6 | 139.6 | 139.5 | 141.7 |
| Net lending (+) / net borrowing (-) | -2.0 | -2.4 | -12.9 | -11.7 | -7.5 | -5.8 |
| Central government | -2.9 | -2.7 | -13.4 | -12.4 | -7.4 | -6.0 |
| Local government | -2.0 | -3.0 | 0.2 | -0.8 | -2.0 | -1.5 |
| Wellbeing services counties | | | | | | -0.6 |
| Employment pension schemes | 2.4 | 2.7 | 0.4 | 1.5 | 2.0 | 2.1 |
| Other social security funds | 0.6 | 0.6 | -0.2 | -0.0 | -0.0 | 0.3 |
| Primary balance ⁵ | 0.1 | -0.4 | -11.3 | -10.5 | -6.5 | -4.9 |

¹ As calculated in the National Accounts² Incl. capital taxes³ Incl. capital transfers and consumption of fixed capital⁴ Gross fixed capital formation and capital transfers⁵ 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 | 41.7 | 42.3 | 41.6 | 41.2 |
| General government expenditure ¹ | 53.4 | 53.2 | 56.7 | 56.3 | 54.0 | 53.1 |
| Net lending | -0.9 | -1.0 | -5.4 | -4.7 | -2.9 | -2.2 |
| Central government | -1.3 | -1.1 | -5.6 | -5.0 | -2.9 | -2.3 |
| Local government | -0.9 | -1.3 | 0.1 | -0.3 | -0.8 | -0.6 |
| Wellbeing services counties | | | | | | -0.2 |
| Employment pension institutions | 1.0 | 1.1 | 0.2 | 0.6 | 0.8 | 0.8 |
| Other social security funds | 0.2 | 0.3 | -0.1 | -0.0 | -0.0 | 0.1 |
| Primary balance ² | 0.0 | -0.2 | -4.8 | -4.2 | -2.5 | -1.8 |
| General government debt | 59.7 | 59.5 | 69.2 | 71.6 | 72.4 | 73.9 |
| Central government debt | 44.9 | 44.3 | 52.6 | 55.3 | 56.1 | 57.6 |
| General government employment, 1,000 persons | 634 | 653 | 656 | 657 | 667 | 660 |
| Central government | 135 | 138 | 140 | 140 | 140 | 140 |
| Local government | 486 | 502 | 503 | 505 | 514 | 259 |
| Wellbeing services counties | | | | | | 248 |
| Social security funds | 13 | 13 | 13 | 13 | 13 | 13 |

¹ EU-harmonized definition² Net lending excluding gross interest expenses

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

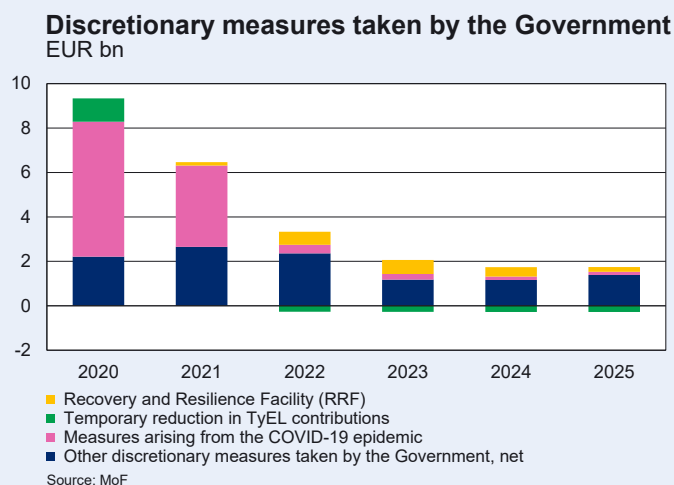
| | 2019 | 2020 | 2021** | 2019 | 2020 | 2021** |
|------------------|--------------------|-------|--------|-------|-------|--------|
| | Fiscal balance | | | Debt | | |
| | relative to GDP, % | | | | | |
| *Finland | -1.0 | -5.4 | -4.7 | 59.5 | 69.2 | 71.6 |
| Finland | -1.0 | -7.6 | -4.8 | 59.3 | 69.8 | 71.8 |
| United Kingdom | -2.3 | -13.3 | -8.9 | 85.4 | 104.4 | 111.0 |
| Sweden | 0.5 | -3.9 | -2.5 | 35.1 | 39.9 | 40.5 |
| Denmark | 3.8 | -4.2 | -2.5 | 33.4 | 45.0 | 41.1 |
| Ireland | 0.5 | -6.8 | -5.8 | 57.4 | 63.1 | 66.1 |
| Spain | -2.9 | -12.3 | -9.6 | 95.5 | 120.3 | 122.0 |
| The Neatherlands | 1.7 | -7.2 | -5.7 | 48.7 | 60.0 | 63.5 |
| Luxembourg | 2.4 | -5.1 | -1.3 | 22.0 | 25.4 | 27.3 |
| Portugal | 0.1 | -7.3 | -4.5 | 117.2 | 135.2 | 130.3 |
| Austria | 0.7 | -9.6 | -6.4 | 70.5 | 84.2 | 85.2 |
| Germany | 1.5 | -6.0 | -4.0 | 59.6 | 71.2 | 70.1 |
| France | -3.0 | -10.5 | -8.3 | 98.1 | 115.9 | 117.8 |
| Belgium | -2.0 | -11.2 | -7.1 | 98.1 | 117.7 | 117.8 |
| Italy | -1.6 | -10.8 | -7.8 | 134.7 | 159.6 | 159.5 |
| Greece | 1.5 | -6.9 | -6.3 | 180.5 | 207.1 | 200.7 |

Sources: EU Commission Autumn Forecast 2020; *Finland: Ministry of Finance, Spring 2021

Fiscal stance

Both automatic stabilisers and the measures introduced by the Government allow public finances to support economic activities during the COVID-19 epidemic. The deepest point of the downturn was probably reached in 2020 and the most extensive support measures were also budgeted for last year.

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. The measures impacting the budgetary position recognised in the national accounts at general government level and introduced by the Government¹ total about EUR 9 billion (for 2020) and about EUR 6 billion (for 2021).



According to current estimates, Finland will receive approximately EUR 2.1 billion in grants from the EU's Recovery and Resilience Facility (RRF). 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 Eurostat² estimate on the recording of RRF in statistics on public finances. The assumed timing of the expenditures is based on a technical assumption and may change in further preparation.

² Section 27) <https://ec.europa.eu/eurostat/documents/10186/10693286/GFS-Draft-guidance-note-statistical-recording-recovery-resilience-facility.pdf>

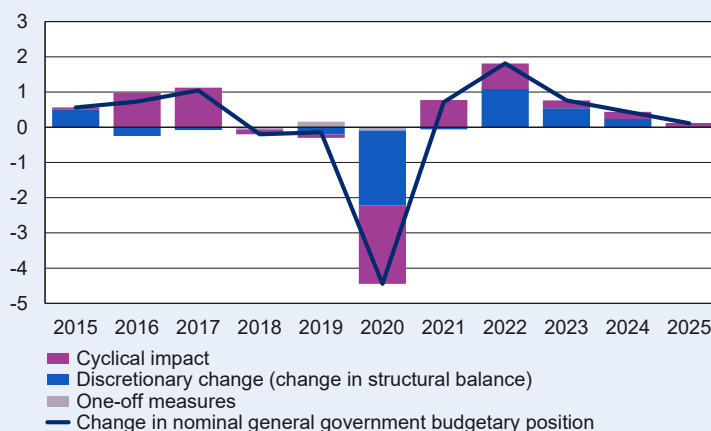
There are measures impacting general government finances in which the timing cannot be directly derived from annual budgeted revenue and expenditure, as multiannual appropriations can also be used after the budget year. This is particularly true in 2021, as a significant amount of budgeted appropriations were carried over from 2020 to the coming years. The use of deferrable appropriations and its estimated impact on the budgetary position recognised in the national accounts have been taken into account in the forecast for general government finances.

Appropriations for 2020 from several budget items will be carried over to 2021. The deferrable appropriations include most of the support for companies: about EUR 550 million of the EUR 700 million budgeted for the purpose was carried over to this year. Nearly EUR 900 million of the funding allocated to protective equipment and vaccine purchases and to coronavirus measures by municipalities and hospital districts were carried over to this year. Just over EUR 400 million of the funds allocated for supporting state-owned companies (Finnair) was also carried over to this year. A total of EUR 900 million in other financial investments that are not considered as expenditure in the national accounts were also carried over to this year. It is assumed in the forecast that most of the deferrable appropriations will be spent this year and the rest in 2022.

The chart below describes the estimated impact of the discretionary fiscal policy (blue bar) and cyclical factors (purple bar) on the annual change in general government budgetary position. In the chart, the impact of discretionary fiscal policy is described using change in structural balance based on potential output calculations. According to the estimate, cyclical factors accounted for nearly half of the substantial weakening of the general government budgetary position in 2020, while the remainder can be attributed to discretionary fiscal policy.

The change in structural balance suggests that fiscal policy was expansionary in 2020. This is natural because the COVID-19 epidemic and the downturn following it prompted the Government to introduce massive support measures to help citizens and companies. The measures set out in the Government Programme also helped to stimulate the economy in 2020.

Change in general government budgetary position percentage points



Source: MoF

In contrast, the fiscal stance for 2021 would seem to be more or less neutral even though more measures boosting spending will still be in effect that year than what was planned by the Government at the start of its term. However, compared with the year 2019, fiscal policy remains expansionary but the scale of the stimulation will no longer increase from 2020. In year-to-year comparisons, fiscal policy will automatically turn contractionary in 2022 as many of the one-off measures prompted by the epidemic will come to an end as the crisis eases in 2021. The examination also shows that the strengthening of general government finances will be significantly boosted by cyclical factors in 2021 and 2022.

2.1.1 General government debt

Last year, the general government debt ratio grew dramatically, by about 10 percentage points and reached 69.2% of GDP. The debt totalled EUR 164.3 billion, an increase of EUR 21.4 billion from 2019. The debt ratio will grow rapidly in 2021 and in the coming years and it will reach 75.6 per cent in 2025.

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 2.1 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 will contract as deferrable appropriations budgeted for 2020 are 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 increased 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.

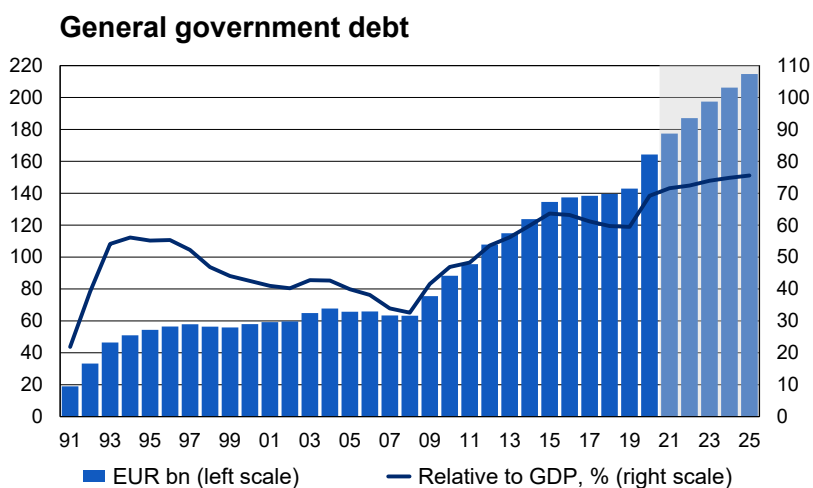
Other factors describe the expenditure and revenue that do not impact the deficit recognised in the national accounts. In 2020, the debt ratio increased more than what would have been required to cover the deficit. Borrowing will also be reduced by government plans to finance one-off expenditure increases 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 | 69.2 | 71.6 | 72.4 | 73.9 | 74.8 | 75.6 |
| Change in debt ratio | -0.3 | 9.7 | 2.4 | 0.8 | 1.5 | 0.9 | 0.7 |
| Factors impacting change in debt ratio | | | | | | | |
| Primary budgetary position (excluding employment pension funds) | 1.3 | 4.9 | 4.8 | 3.3 | 2.6 | 2.2 | 2.2 |
| Interest expenditure | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 |
| Other factors ¹ | -0.7 | 3.4 | -0.1 | 0.1 | 0.9 | 0.8 | 0.6 |
| Change in GDP | -1.6 | 0.7 | -2.9 | -2.9 | -2.4 | -2.3 | -2.2 |
| | | | | | | | |
| Surplus of employment pension funds | 1.1 | 0.2 | 0.6 | 0.8 | 0.8 | 0.7 | 0.8 |

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."



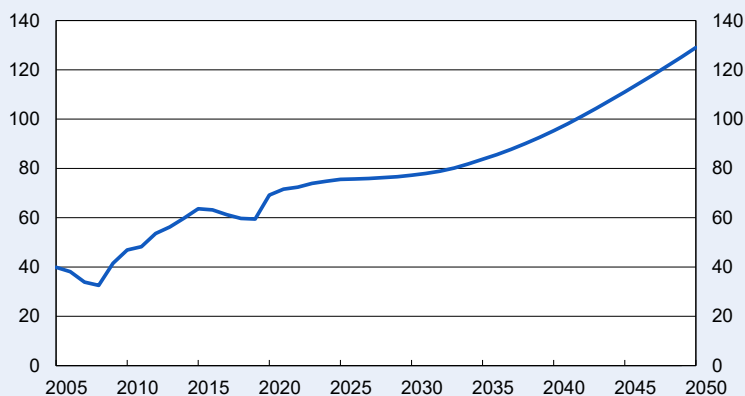
Sources: Statistics Finland, MoF

VM34098

Long-term trends in public debt ratio

Public debt-to-GDP ratio will continue to increase in the long term. The debt ratio pressure calculation from 2025 onwards¹ is based on the information used in sustainability calculations². From 2026 onwards, the change in the combined primary balance of central government, local government and wellbeing services 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 HX project are also taken into account in general government debt. In the calculations, the fighter aircraft project will increase the debt by about EUR 10 billion between 2021 and 2030.

General government debt relative to GDP, %



Sources: Statistics Finland, MoF

1 Trends in Finland's public debt ratio and sensitivity assessments are described in more detail in the Ministry of Finance discussion paper Hytönen & Tamminen - Julkisen velan kehitys Suomessa ja siihen vaikuttavat tekijät (Finland's government debt and the contributory factors)

2 Long-term sustainability of Finland's general government finances is examined in more detail in the Ministry of Finance report Suomen julkisen talouden kestävyys (2020) (Sustainability of Finland's public finances)

Ageing of the population will further increase the primary deficit after the mid-2020s. The gradual rise in interest rates will also have a delayed impact on government debt servicing costs. In the pressure calculation, the debt ratio will continue to grow in the coming decades, exceeding 100% in the 2040s.

Over the longer term, annual GDP growth will be modest, amounting to less than 1.5% on average in 2026-2050. Inflation is expected to be 2% over the long term. The fact that the surpluses or deficits of employment pension institutions do not affect general government borrowing is taken into account in the calculations.

Interest expenses on public debt are currently at historical lows. The trend in the effective interest rate on public debt (interest payments in relation to debt) has been downwards for many years and the trend is expected to continue in the medium term. In the long-term debt calculation baseline, interest rates are also expected to remain low for many years. The effective interest rate on public debt (interest expenses-to-debt ratio) will rise to one per cent in the early 2030s and to four per cent in the 2040s (which is also the long-term assumption).

The situation described in the calculation, in which nominal growth is expected to remain above the effective interest rate for such a long period, is exceptional in historical terms. Interest rate trends are influenced by several factors pulling in different directions, and it is impossible to make accurate predictions of when interest rates might start rising. However, we should also prepare for a situation in which interest rates will rise faster than what is assumed in the baseline. 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.

2.2 Central government

Last year, there was a sharp deterioration of central government budgetary position as a result of the COVID-19 epidemic. According to preliminary national accounts, the budgetary position in 2020 was EUR 13.4 billion in deficit (5.6% 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.

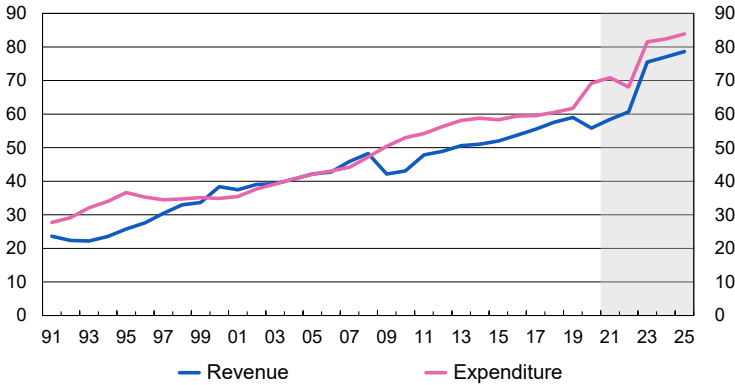
Despite economic recovery, central government budgetary position is estimated to be over EUR 12 billion in deficit this year, which is five per cent of GDP. The active fiscal policy pursued by the Government has boosted discretionary spending. Last year, Prime Minister Marin's Government presented seven 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 the period 2022-2023. RRF spending will be channelled to investment grants, subsidies, public consumption and public investments. In the first stage, RRF spending increases will be covered from the current transfers granted by the EU. Finland will have to pay its RRF funding contribution in the period 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, central government tax revenue (both direct and indirect taxes) will increase significantly this year.

Next year, the central government deficit will be drastically reduced as revenue increases rapidly and temporary spending increases prompted by the COVID-19 epidemic are eliminated at the end of 2021, which will cause expenditure to decline. Despite the improvement, the budgetary position will be more than EUR 6 billion in deficit.

The deficit will narrow slightly between 2023 and 2025 as revenue will increase more rapidly than expenditure. 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 end of the outlook period, 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.

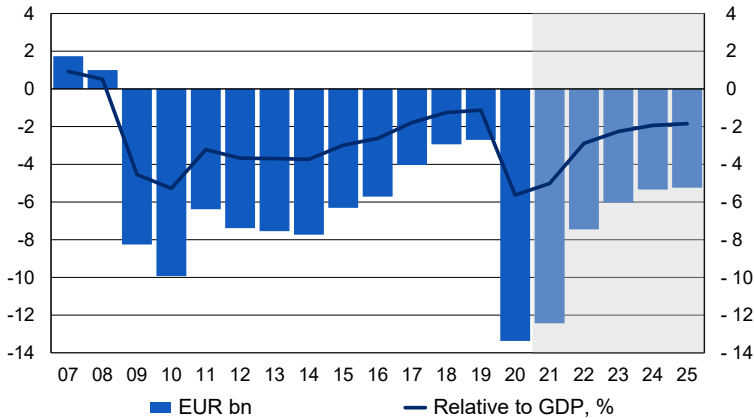
Central government revenue and expenditure EUR bn



Sources: Statistics Finland, MoF

VM34098

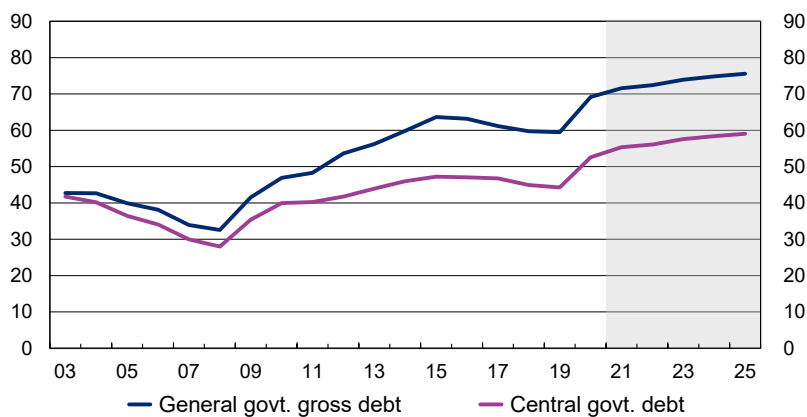
Central government financial balance



Sources: Statistics Finland, MoF

VM34098

General government debt relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

Table 18. Central government¹

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | EUR billion | | | | | |
| Current taxes | 14.9 | 15.2 | 13.2 | 14.1 | 15.2 | 29.3 |
| Taxes on production and imports | 33.0 | 33.6 | 32.9 | 34.5 | 35.0 | 35.7 |
| 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 | 46.9 | 49.5 | 51.1 | 65.9 |
| Other revenue ³ | 9.1 | 9.5 | 9.3 | 9.2 | 9.8 | 9.9 |
| of which interest receipts | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 |
| Total revenue | 57.8 | 59.1 | 56.2 | 58.7 | 60.9 | 75.7 |
| Consumption expenditure | 14.0 | 14.5 | 15.7 | 16.5 | 16.7 | 16.5 |
| Subsidies and current transfers, total | 40.0 | 40.6 | 47.5 | 47.2 | 45.1 | 59.1 |
| to general government | 28.2 | 28.7 | 33.1 | 32.9 | 32.1 | 46.0 |
| Interest expenses | 1.9 | 1.8 | 1.5 | 1.1 | 0.9 | 0.7 |
| Capital expenditure ⁴ | 4.7 | 4.9 | 4.9 | 6.3 | 5.7 | 5.4 |
| Total expenditure | 60.7 | 61.8 | 69.6 | 71.1 | 68.4 | 81.8 |
| Net lending (+) / net borrowing (-) | -2.9 | -2.7 | -13.4 | -12.4 | -7.4 | -6.0 |
| Primary balance ⁵ | -1.0 | -0.9 | -11.9 | -11.3 | -6.6 | -5.3 |

¹ As calculated in the National Accounts² Incl. capital taxes³ Incl. capital transfers (excl. capital taxes) and consumption of fixed capital⁴ Gross fixed capital formation and capital transfers⁵ Net lending excluding gross interest expenses

Central government on-budget accounts and expenditure in 2022-2025

In 2022-2025, central government spending will be significantly impacted by the health and social services reform, which would technically lead to an increase of about EUR 13.4 billion in on-budget expenditure from 2023 onwards at 2022 prices. Without the impact of the reform, central government expenditure would decrease by an average of 2.3 % per year during the spending limits period. This is due to the decrease in expenditure outside the spending limits and, in particular, the elimination of expenditure needs arising from the coronavirus epidemic as well as exceptionally high expenditure in the beginning of the spending limits period.

In 2025, central government expenditure, excluding the above-mentioned impact of the health and social services reform, will total about EUR 61.0 billion, compared with about EUR 63.8 billion in 2022 and about EUR 67.1 billion in 2021 (incl. the second supplementary budget proposal) at 2022 price levels.

Expenditure outside the spending limits will decrease by a total of EUR 1.4 billion, or by about 11.6 % during the spending limits period, taking into account the structural changes caused by the health and social services reform. The decline will be steepest in cyclical expenditure, which decreases as the unemployment rate declines at the estimated rate. In addition, debt interest payments and VAT appropriations will decrease significantly.

The value of Finland's GDP will grow at an average annual rate of 3.5% in the period 2022-2025. Changes in tax bases are determined by the overall level of economic activity, which means that the annual tax revenue (excluding the impact of the health and social services reform) will also grow more slowly, at an average rate of 2.7 %.

At the end of the spending limits period (in 2025), on-budget expenditure at current prices will total EUR 79.0 billion, while revenue will amount to EUR 72.3 billion. The average on-budget deficit during the spending limits period is estimated at EUR 7.6 billion each year. Due to delays in the transfer of tax revenue, the health and social services reform will temporarily increase the deficit in 2023 by about EUR 1.3 billion.

On-budget revenue and expenditure, EUR billion 2021-2025

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|-------------|-------|------|------|------|------|
| Revenue | 53.9 | 56.2 | 68.4 | 70.6 | 72.3 |
| Expenditure | 65.9 | 63.8 | 77.3 | 77.7 | 79.0 |
| Balance | -12.0 | -7.6 | -8.9 | -7.1 | -6.7 |

The expenditure for the period 2023-2025 has been converted into nominally priced spending using the central government expenditure price index projection.

Comments on developments after the previous General Government Fiscal Plan

Compared with the General Government Fiscal Plan presented a year ago, the most significant change concerns the wellbeing services counties. In technical terms, the reform will lead to an increase in on-budget revenue and expenditure as local government responsibilities are transferred to wellbeing services counties in 2023.

As part of the reform, local income tax will be lowered, and the state income tax revenue will be increased. With the reform, an estimated total of EUR 12.5 billion in income and capital income taxes and corporation taxes previously paid to municipalities will be transferred to on-budget economy in 2023. In this connection, taxation of earned income will be decreased by about EUR 185 million in connection with the wellbeing services counties reform to ensure that no income earner group would have to pay higher taxes as a result of the system change. Due to the delays in the transfer of tax revenue, the effects of changes in the tax base are not fully reflected in the year when the reform enters into force. Due to timing factors affecting expenditure and revenue in different ways, the increase in expenditure resulting from the health and social services reform in the table below appears higher than the increase in revenue.

The estimate of Finland's EU contributions is based on the agreement reached by the EU institutions on the future financing framework and the system of own resources. Due to the combating of the economic effects of the coronavirus crisis, the focus has shifted to the first years of the EU's financing framework period, which will increase Finland's contributions in these years compared to the previous national spending limits decision. At the beginning of the spending limits period, the membership contribution is more than EUR 200 million higher than what was anticipated last spring. However, the gap will narrow considerably towards the end of the outlook period.

The EU Recovery and Resilience Facility impacts both revenue as well as government expenditure. Revenue from the facility will be EUR 386 million while expenditure related to the facility will be EUR 444 million on average during the spending limits period.

On average, the debt interest payments will be approximately EUR 300 million lower during the spending limits period than what was estimated in spring 2020. Instead of the anticipated slight increase, further decrease in the average debt interest rate is expected. In 2024, debt interest payments will be EUR 520 million lower than what was estimated a year ago, even though the total debt estimate for the same period has increased by EUR 12 billion.

It is also estimated that cyclical expenditure, such as unemployment security and housing allowance, will decrease compared with the previous spending limits decision. Between 2022 and 2024, annual cyclical expenditure will on average decrease by EUR 100 million more than what was estimated in spring 2020. The unemployment rate is estimated to average 6.9 % between 2022 and 2024, whereas in spring 2020, it was estimated to average 7.8% in the same period.

The improvement in the cyclical situation will increase the estimated tax revenue by an average of EUR 0.7 billion per year between 2022 and 2024 compared with the previous General Government Fiscal Plan. The Government's most important tax policy decisions had already been taken into account in the previous General Government Fiscal Plan. The tax base changes introduced after the JTS presented last spring include supporting local government finances by increasing their corporation tax apportionment.

At the end of the outlook period, central government is expected to receive about EUR 200 million less in miscellaneous revenue compared with last year's General Government Fiscal Plan. The most important single reason is the decline in gambling revenue as a result of the decline in the market share of Veikkaus and measures to combat the negative effects of gambling.

In accordance with the Government Programme, one-off future-oriented investments will be financed through property income (sales of assets). Sales related to future-oriented investments will total EUR 2 billion and will take place between 2021 and 2022. In addition, sales of shares are also expected to generate EUR 0.4 billion to fund other expenditure each year between 2021 and 2023. Compared with the previous General Government Fiscal Plan, the asset income estimate for the last years of the outlook period is reduced by the fact that the assumption of annual sales of EUR 0.4 billion has been abandoned for the next parliamentary term. This is because they will require new decisions by the next government.

Factors affecting changes in on-budget balance compared with the General Government Fiscal Plan of spring 2020, EUR billion

| | 2022 | 2023 | 2024 |
|--|------|-------|-------|
| Estimated balance, General Government Fiscal Plan of 16 April 2020 | -7.3 | -7.6 | -7.4 |
| Revision of expenditure estimate | -1.8 | -14.5 | -13.9 |
| Impact of health and social services reform on expenditure | 0.0 | -13.7 | -14.0 |
| Contributions to the European Union | -0.2 | -0.1 | 0.0 |
| Change in debt interest payment estimate | 0.2 | 0.3 | 0.6 |
| Unemployment security, housing allowance and pay security | 0.0 | 0.2 | 0.2 |
| Expenditure related to the use of the EU Recovery and Resilience Facility | -0.5 | -0.5 | -0.4 |
| Other changes in expenditure (net), including more accurate index adjustments | -1.2 | -0.7 | -0.3 |
| Revision of revenue estimate | 1.5 | 13.2 | 14.2 |
| New tax criteria changes (net) | -0.1 | -0.3 | -0.1 |
| Changes to estimates of interest, dividend and sales of shares income | 0.3 | 0.0 | -0.4 |
| Changes to the estimate of miscellaneous revenue | 0.0 | -0.1 | -0.2 |
| Impact of health and social services reform on tax revenue | 0.1 | 12.5 | 13.8 |
| Revenue from the EU Recovery and Resilience Facility | 0.3 | 0.5 | 0.5 |
| Tax payment arrangements (postponement of payments) | 0.2 | 0.1 | 0.0 |
| Other factors affecting projected revenue (including accrual data and new economic forecast) | 1.0 | 0.6 | 0.7 |
| Total change | -0.3 | -1.3 | 0.3 |
| Balance projection, General Government Fiscal Plan 2022–2025 12 May 2021 | -7.6 | -8.9 | -7.1 |

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 | 2.8 | 3.0 | 2.9 | 2.8 | 2.8 |
| Wage and salary earnings and other income | 3.0 | 3.7 | 3.1 | 2.8 | 3.1 |
| Pensions and other social security benefits | 0.9 | 1.4 | 2.7 | 2.9 | 2.1 |
| Capital income | 7.5 | 3.0 | 2.7 | 2.7 | 3.7 |
| Index of wage and salary earnings | 2.7 | 2.5 | 2.5 | 2.5 | 2.5 |
| Operating surplus | 5.0 | 4.1 | 4.6 | 4.6 | 4.5 |
| Value of household taxable consumption expenditure | 4.7 | 3.4 | 2.6 | 3.3 | 3.5 |
| VAT base | 5.9 | 3.2 | 2.3 | 2.7 | 3.5 |
| Petrol consumption | -0.4 | 0.4 | -2.3 | -2.6 | -1.5 |
| Diesel consumption | -4.9 | -0.5 | -2.3 | -2.5 | -2.6 |
| Electricity consumption | 6.2 | 1.9 | 1.2 | 0.8 | 2.1 |
| Duty-paid alcohol consumption | -4.9 | -0.5 | -2.3 | -2.5 | -2.6 |
| New passenger cars | 101071 | 110012 | 115287 | 117149 | 112472 |
| Consumer price index | 1.4 | 1.5 | 1.7 | 1.7 | 1.6 |

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-pp | 441, of which central govt. 125 and local govt. 210 |
| | Pension incomes | 1-pp | 142, of which central govt. 38 and local govt. 92 |
| Capital income tax | Investment income | 1-pp | 40 |
| Corporate tax | Operating surplus | 1-pp | 52, of which central govt. 29 and local govt. 23 |
| VAT | Value of private consumption | 1-pp | 126 |
| Car tax | Sales of new cars | thousands | 4 |
| Energy tax | Electricity consumption ¹ | 1-pp | 9 |
| | Petrol consumption | 1-pp | 13 |
| | Diesel consumption | 1-pp | 14 |
| Duty on alcoholic beverages | Alcohol consumption | 1-pp | 14 |
| Duty on cigarettes | Cigarette consumption | 1-pp | 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. supple- mentary budget | | | | | annual change, % |
| | EUR billion | | | | | | |
| Total tax revenue estimates | 42.4 | 45.3 | 47.3 | 60.5 | 63.0 | 64.7 | 9.2 |
| Income and wealth taxes | 12.9 | 14.1 | 15.0 | 27.8 | 29.9 | 31.0 | 22.4 |
| Taxes based on turnover | 19.2 | 21.2 | 22.0 | 22.3 | 22.8 | 23.5 | 4.2 |
| Excise duties | 7.2 | 6.9 | 7.4 | 7.4 | 7.3 | 7.2 | -0.1 |
| Other taxes | 3.0 | 3.0 | 2.9 | 2.9 | 3.0 | 3.0 | -0.1 |
| Miscellaneous revenue | 5.7 | 5.8 | 6.0 | 6.1 | 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 | 56.2 | 68.4 | 70.6 | 72.3 | 8.0 |

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 | -435 | -720 | -431 | -481 |
| Average increase in municipal tax rate | 80 | 60 | 0 | 0 | 0 | 0 |
| Investment income tax | 26 | 26 | 0 | 0 | 0 | 0 |
| Corporate tax | -91 | -100 | -9 | 20 | 231 | 105 |
| Other direct taxes | 2 | -108 | -87 | -13 | 0 | 0 |
| Value-added tax | -34 | 33 | -13 | 0 | 0 | 0 |
| Energy taxes | 82 | 96 | 175 | 64 | 24 | 8 |
| Other indirect taxes | 43 | 93 | 59 | 50 | 33 | 0 |
| Social security contributions | -746 | 1641 | -281 | 247 | 77 | -5 |

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 13.4 billion or about EUR 4.1 billion lower. No direct conclusions on the central government budgetary position recognised in the national accounts can be made on the basis of the central government 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.

In the outlook period, the budget balance is close to the budgetary position recognised in the national accounts in 2021 and 2022. However, there are many differences affecting these developments in a number of different ways. The deferrable appropriations carried over from 2020 will be used in both years, 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 addition, 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 weaken the budget, and to the tax revenue timing adjustments related to the health and social services reform that differ from the budget recognised in the national accounts.

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 coronavirus-related expenditure, which also led to an increase in central government cash reserves.

There are several reasons for the difference between the central government 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 lending¹

| | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|-------------|-------|--------|--------|--------|
| | EUR billion | | | | |
| On-budget surplus (+) / deficit (-) ² | -2.0 | -17.4 | -12.3 | -7.6 | -8.9 |
| Privatization proceeds (net proceeds from equity sales) | -0.1 | 0.5 | -0.9 | -1.2 | -0.3 |
| Financial investment, net | -0.4 | -0.4 | -0.2 | -0.2 | -0.2 |
| Revenue surplus in off-budget units | -0.5 | -0.2 | -0.2 | -0.2 | -0.2 |
| Cash / accrual basis adjustment | 0.1 | 0.5 | 2.2 | 1.3 | 2.8 |
| Other adjustment items ³ | 0.2 | 3.7 | -1.1 | 0.3 | 0.7 |
| Central government net lending (+) / borrowing (-) | -2.7 | -13.4 | -12.4 | -7.4 | -6.0 |

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 preliminary national accounts, local government budgetary position improved by a record EUR 3.2 billion in 2020, creating a surplus of 0.1% of GDP. The improvement is explained by the extensive central government support measures introduced to secure basic services and to maintain local government activities.

In 2021, local government budgetary position will decline and turn into a deficit of about EUR 0.8 billion despite the economic recovery and central government support measures. This is caused by 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. It is also estimated that a service and care backlog will accumulate from last year and this spring and reducing the backlog will cause expenditure pressures as the epidemic eases. The Government has pledged to finance the new and expanding local government tasks and compensate the municipalities for the costs directly linked to the coronavirus.

The economic projection of local government finances for 2022-2025 is a pressure projection 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 projection takes into account the Government proposal to reform health and social services and rescue services, which will transfer the responsibility for these tasks from municipalities to wellbeing services counties in 2023.

Even though the increase in local government expenditure will slow down significantly in 2022 as the COVID-19 crisis eases, local government budgetary position will deteriorate dramatically again in 2022 as the temporary support measures come to an end. 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.

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. For many years, the ageing of the population has increased the need for care and nursing services, adding to expenditure pressures in local government. The health and social services reform will ease the pressures to increase local government expenditure. 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. In order to ensure that the reduction in service needs will also lead to lower spending, municipalities must be prepared to adjust their services in accordance with the changing service needs. In many small municipalities, the school network has already been cut to such an extent so that closing additional schools would mean ending the service altogether. Therefore, the impact of a decrease in service needs has been softened in the projection.

Local government investments are at a fairly high level when compared with the past trends. 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.

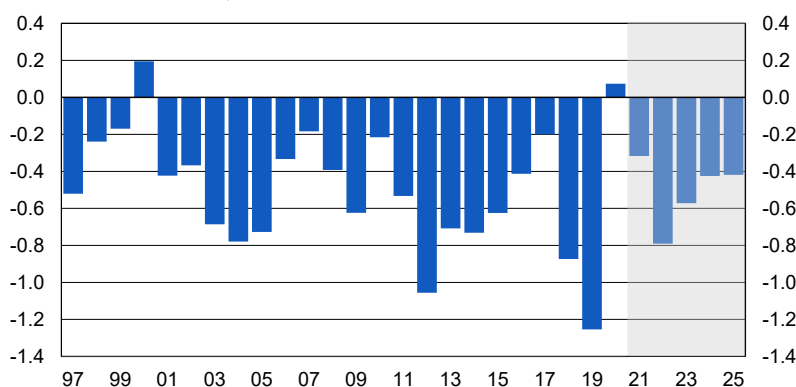
The structural imbalance of local government revenue and expenditure means that local government will accumulate additional debts until 2023. With the health and social services reform, about EUR 4.6 billion in debts will be transferred from local government to wellbeing services counties in 2023. According to pressure projections, local government deficits will persist after the introduction of the health and social services reform, but the deficit will settle at 0.4% of GDP in the period 2024 and 2025. This is also reflected in slower growth of local government debt ratio.

Table 24. Local government¹

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | EUR billion | | | | | |
| Taxes and social security contributions | 22.5 | 23.2 | 24.5 | 25.1 | 25.4 | 12.1 |
| of which municipal tax | 18.8 | 19.4 | 20.5 | 20.6 | 21.3 | 8.7 |
| corporate tax | 1.9 | 1.9 | 2.1 | 2.6 | 2.0 | 1.4 |
| real estate tax | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 2.1 |
| Other revenue ² | 19.4 | 20.0 | 23.2 | 23.8 | 23.4 | 13.3 |
| of which interest receipts | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| transfers from central government | 14.2 | 14.4 | 17.5 | 18.0 | 17.3 | 7.5 |
| Total revenue | 41.8 | 43.1 | 47.7 | 48.9 | 48.8 | 25.4 |
| Consumption expenditure | 35.8 | 37.5 | 38.5 | 40.4 | 41.4 | 19.3 |
| of which compensation of employees | 21.4 | 22.1 | 22.3 | 23.0 | 24.0 | 12.3 |
| 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 | 0.8 | 0.2 |
| subsidies and other transfers | 1.6 | 1.6 | 1.8 | 1.8 | 1.8 | 1.8 |
| interest expenses | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Capital expenditure ³ | 5.6 | 6.2 | 6.4 | 6.6 | 6.6 | 5.5 |
| Total expenditure | 43.9 | 46.2 | 47.5 | 49.7 | 50.9 | 26.9 |
| Net lending (+) / net borrowing (-) | -2.0 | -3.0 | 0.2 | -0.8 | -2.0 | -1.5 |
| Primary balance ⁴ | -2.2 | -3.1 | 0.1 | -0.7 | -1.9 | -1.4 |

¹ As calculated in the National Accounts² Incl. capital transfers and consumption of fixed capital³ Gross capital formation and capital transfers⁴ Net lending excluding gross interest expenses

Local government financial balance relative to GDP, %

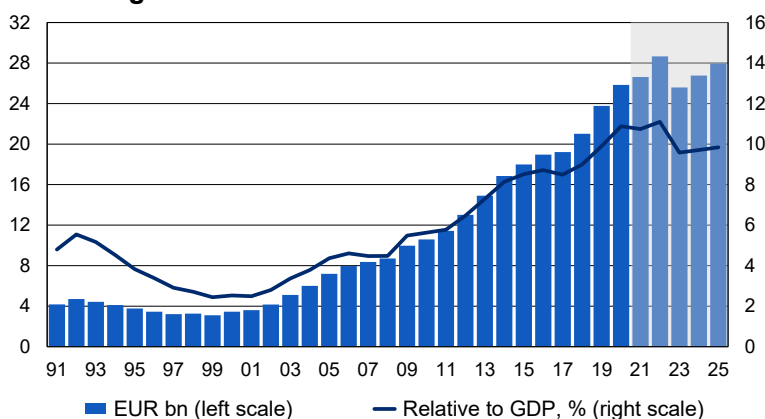


Incl. health and social services reform as of 2023

Sources: Statistics Finland, MoF

VM34098

Local government debt



Incl. health and social services reform as of 2023

Sources: Statistics Finland, MoF

VM34098

Differences between local government accounting and national accounts

The closest local government accounting equivalent to the national accounts concept of net lending is the cash flow from operations and investments. The two accounting systems define sector boundaries differently, and the same goes for the timing of concepts and entries. The reasons for the differences between the cash flow from operations and investments in local government accounting and net lending in the national accounts are examined in the table below.

The most important conceptual difference stems from sector definitions. Local government accounting is concerned with municipalities, joint municipal authorities and their commercial institutions, and excludes municipal operations conducted by an independent legal entity, for example in the form of a limited liability company. The definition of the local government sector in the national accounts, on the other hand, does include enterprises owned by municipalities, mainly treating them as units serving their parent entity.

The local government sector is understood in the national accounts to comprise the non-market operations of local and joint municipal authorities, which are primarily financed from tax revenues and compulsory payments. Public corporations that primarily finance their operations through sales revenue from other sectors, such as water, waste and energy management, and port activities, are therefore classified in the national accounts in the corporations sector, outside the local government sector.

The concept of an investment expenditure differs in local government accounting and national accounts. Acquisitions and sales of shares and equities are recorded in the national accounts as financial transactions and not under local government investment expenditure. Local government accounting, on the other hand, record share acquisitions as investments in fixed assets.

There are also differences in the concepts of property expenditure and incomes. In the national accounts, changes in the value of assets and liabilities are not included in income or expenditure, so the other financing revenue and costs of municipalities and joint municipal authorities (excluding dividends and interest) are not included in the national accounts definition of net lending.

There are also differences in the timing of entries in local government accounting and in the national accounts. In local governments' accounts, tax revenue describes the amount of tax collected during the calendar year. In the national accounts, tax revenue for the year in question is based on the tax authorities' accounts of tax remittance from February through to the end of January the following year. This is intended to take into account the timing difference between advance tax payments and remittance to government. The difference in timing between local government accounting and national accounts in 2023 is due to the transfer of health and social services and rescue services to wellbeing services counties. The tax revenue accrued

by municipalities in 2023 is partly affected by taxes debited on higher municipal tax rates in effect in previous tax years. This phenomenon will also affect corporation tax revenue.

Table 25. Financial position in local government accounting and local government net lending

| | 2019 | 2020 | 2021** | 2022** | 2023** |
|---|-------------|------|--------|--------|--------|
| | EUR billion | | | | |
| Cash flow from municipalities' and joint municipal authorities' operations and investments | -2.2 | -0.5 | -0.7 | -1.9 | -0.2 |
| Other than municipalities' and joint municipal authorities' net lending effect ¹ | -0.4 | -0.3 | -0.3 | -0.3 | -0.3 |
| Effect of municipalities' and joint municipal authorities' operations outside the local government sector | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Acquisitions and sales of shares | -0.0 | 0.2 | 0.1 | -0.0 | -0.0 |
| Differences in concepts of property expenditure and income | -0.1 | -0.0 | -0.0 | -0.0 | -0.0 |
| Timing differences | -0.1 | 0.3 | -0.4 | -0.3 | -1.5 |
| Other differences ² | -0.2 | 0.3 | 0.4 | 0.3 | 0.3 |
| Local government net lending (+) / borrowing (-) | -3.0 | 0.2 | -0.8 | -2.0 | -1.5 |

¹ Corporations classified under local government but not included in statistics on municipal finances as well as Government of Åland, Association of Finnish Local and Regional Authorities, Local Government Employers and Municipal Guarantee Board.

² E.g. differences in capital transfers and investment grants.

2.4 Wellbeing services counties

In the projection for general government finances, wellbeing services counties will be treated as a separate local government sub-sector from 2023 onwards. Responsibility for health and social services and rescue services will be transferred from municipalities to wellbeing services counties. In the projection, 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 slightly in the deficit (about 0.2% of GDP). The deficit is due to the high level of health and social services investments.

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

Expenditure trends of the wellbeing services counties will be based on estimated increases in service needs and anticipated price trends. Investment estimates are based on hospital district budgets. 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 account for EUR 25.2 billion of the total. Initially, the wellbeing services counties also incur costs as they launch and organise their activities. It is assumed in the projection that the change costs arising from ICT changes, administrative expenses and harmonisation of wages and salaries will be as estimated in the Government proposal for the health and social services reform. Scale of the change costs involves uncertainties.

Table 26. Welfare services counties

| | 2023** |
|-------------------------------------|-------------|
| | EUR billion |
| Total revenue | 26.4 |
| Total expenditure | 27.0 |
| Net lending (+) / net borrowing (-) | -0.6 |
| Debt | 5.1 |

2.5 Social security funds

2.5.1 Employment pension institutions

Financial position of employment pension institutions collapsed last year, amounting to only 0.2% of GDP. The reason for the deterioration was the decrease in the employment pension insurance contributions received, which was due to the temporary reduction in employers' contribution rates prompted by the COVID-19 pandemic and a reduction in the wage bill. There was also a dramatic reduction in the property income of the sector.

The financial position will recover to 0.6% of GDP in 2021 as the pension contribution rates return to their normal levels. The wage bill and property income will pick up. The temporary increase in employment pension insurance contribution rates in 2022 will further improve the financial position of the sector and the financial position will stay at about 0.8% of GDP until the year 2025.

Property income (interest payments and dividends) contracted by almost 20% in 2020. Starting this year, property income will grow again but will only reach the 2019 levels in 2023. Earnings-related pension assets have recovered from the collapse of early 2020 and totalled EUR 224.7 billion, or about 5% higher than at the end of 2019.

Table 27. Finances of social security funds¹

| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | EUR billion | | | | | |
| Investment income | 4.2 | 4.3 | 3.5 | 3.7 | 4.2 | 4.5 |
| Social security contributions | 27.9 | 28.5 | 27.6 | 30.1 | 30.9 | 32.1 |
| of which contributions paid by employers | 17.6 | 17.8 | 16.5 | 18.4 | 19.2 | 19.9 |
| contributions paid by insured | 10.3 | 10.8 | 11.1 | 11.7 | 11.8 | 12.3 |
| Transfer from general government | 15.5 | 15.7 | 17.2 | 16.6 | 16.2 | 16.2 |
| Other revenue | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 |
| Total revenue | 47.9 | 48.9 | 48.8 | 50.8 | 51.7 | 53.3 |
| | | | | | | |
| Consumption expenditure | 3.7 | 3.8 | 3.9 | 4.1 | 4.2 | 4.2 |
| Social security benefits and allowances | 37.9 | 38.5 | 41.0 | 41.5 | 42.0 | 43.1 |
| Other outlays | 3.3 | 3.2 | 3.6 | 3.7 | 3.6 | 3.6 |
| Total expenditure | 44.9 | 45.5 | 48.5 | 49.3 | 49.8 | 50.9 |
| | | | | | | |
| Net lending (+) / net borrowing (-) | 3.0 | 3.3 | 0.3 | 1.5 | 2.0 | 2.4 |
| Earnings-related pension schemes | 2.4 | 2.7 | 0.4 | 1.5 | 2.0 | 2.1 |
| Other social security funds | 0.6 | 0.6 | -0.2 | -0.0 | -0.0 | 0.3 |
| Primary balance ² | 3.0 | 3.4 | 0.3 | 1.5 | 2.0 | 2.4 |

¹ As calculated in the National Accounts² 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. The financial position of other social security funds was 0.1% in deficit last year. This was due to unemployment and an increase in the number of temporary lay-offs.

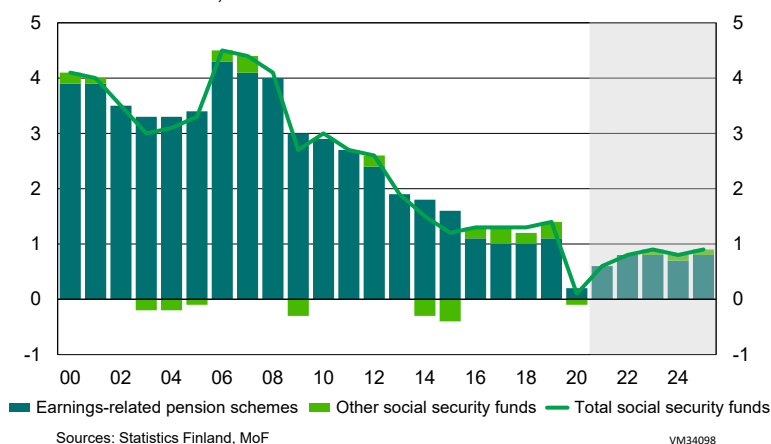
The financial position of the sector will reach near-balance in 2021 and 2022. An increase in the unemployment insurance contribution will boost the revenue of the Employment Fund. At the same time, the revenue will be reduced by the fact that in 2021, central government will no longer finance earnings-related benefits during lay-offs. Lay-off expenditure is estimated to be high this year but will decline from 2022 onwards. The financial position of the sector will be slightly in surplus in 2023.

Table 28. 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 | 1.35 | 1.44 |
| Unemployment insurance | 1.91 | 1.50 | 1.26 | 1.43 | 1.43 | 1.43 |
| 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 | 20.73 | 20.73 |
| Employees | | | | | | |
| Sickness insurance | 1.53 | 1.54 | 1.86 | 2.04 | 1.68 | 1.86 |
| Unemployment insurance | 1.90 | 1.50 | 1.25 | 1.40 | 1.40 | 1.40 |
| 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 | 1.55 |
| Pension indices | | | | | | |
| Earnings-related index (over 65) | 2548 | 2585 | 2617 | 2631 | 2675 | 2718 |
| National pension index | 1617 | 1617 | 1633 | 1639 | 1662 | 1685 |

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.

Social security funds, financial balance relative to GDP, %



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 healthcare and nursing 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 potential impacts of the adjustment or structural reforms on economic growth are not taken into account.¹

The focus in the sustainability gap calculations is on estimating 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.

Climate change is a challenge to the sustainability of general government finances at many levels in the medium term and the long term. Climate change and climate change mitigation have both direct and indirect impacts on general government finances. Expenditure pressures in general government finances may be increased by costs arising from unexpected natural disasters caused by climate change. On the other hand, climate change may also manifest itself in gradual changes in climate and the environment. In that case, we have time to adapt to the phenomenon but its impacts will be more long-lasting. Policy measures and international commitments designed to mitigate climate change and adapt to it will also impact general government finances. Moreover, climate change and climate change mitigation will also lead to refocusing of economic resources, which may create new opportunities for growth but also weaken general government finances. The negative impacts may arise as public funds have to be used to soften the impacts of the changes on citizens and different sectors of the economy.

The Ministry of Finance estimates that the sustainability gap is some 3% relative to GDP (some EUR 8 billion at 2025 level). Since last autumn, the estimated size of the sustainability gap has decreased by more than half a percentage point. The change has been prompted by a more optimistic estimate of general government finances in the medium term (in 2025, which is now the calculation base year).

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 cut 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.

Despite the changes, the sustainability gap estimate has, in qualitative terms, remained more or less unchanged: ageing of the population presents a major challenge to the sustainability of Finland's general government finances. The general government debt-to-GDP ratio is also expected to reach almost 75% in the next few years, which will mean more risks for general government finances than the earlier debt ratio of about 60%.

However, 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. The matter can be examined, for instance, in the manner presented in the Ministry of Finance's report on the sustainability of public finances (in Finnish, with English abstract).²

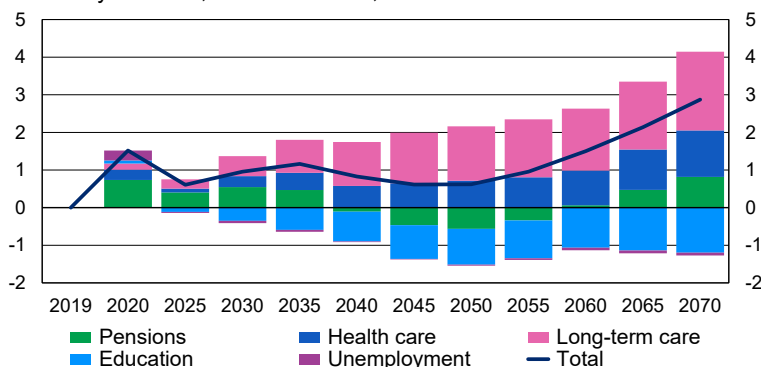
The Ministry of Finance's estimate of the long-term sustainability of general government finances is based on the methods and calculation principles jointly agreed in the EU. The sustainability gap calculation is a pressure projection and not the most probable future scenario. The calculation is based 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 calculation of the sustainability gap are detailed on the Ministry of Finance website.³

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 analyses 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 analyses 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.

2 <https://julkaisut.valtioneuvosto.fi/handle/10024/162357>

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

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



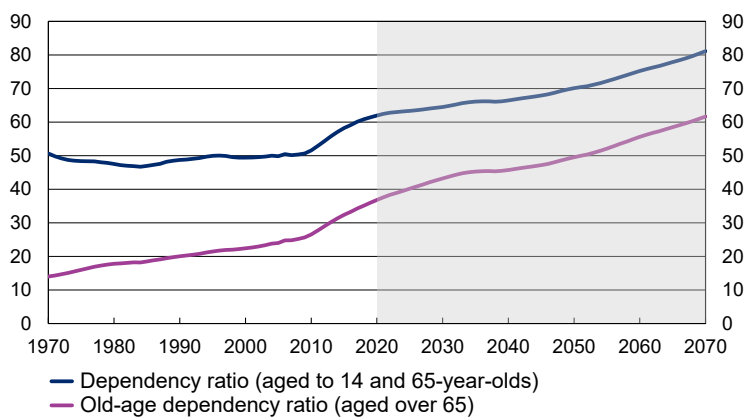
The figure is compiled using the model developed by the Ministry of Social Affairs and Health for social expenditure analysis

Source: MoF

VM34098

Dependency ratio

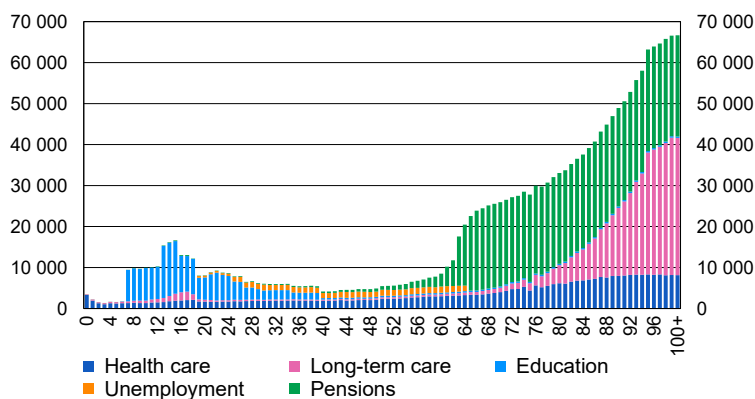
persons per hundred persons of working age



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. General government finances

| | 2019 | 2025** | 2030** | 2040** | 2050** | 2060** | 2070** | 2070/2019** |
|---|--------------------|--------|--------|--------|--------|--------|--------|-------------|
| | relative to GDP, % | | | | | | | change, % |
| Total expenditure | 53.2 | 51.9 | 53.0 | 55.6 | 56.9 | 59.5 | 62.9 | 9.7 |
| of which age-related and unemployment expenditure | 29.7 | 30.3 | 30.6 | 30.6 | 30.3 | 31.2 | 32.6 | 2.9 |
| Pensions | 13.2 | 13.6 | 13.7 | 13.1 | 12.7 | 13.3 | 14.0 | 0.9 |
| Earnings-related pensions | 12.2 | 12.7 | 12.9 | 12.3 | 11.8 | 12.3 | 13.0 | 0.8 |
| National pensions | 1.0 | 0.9 | 0.8 | 0.8 | 0.8 | 1.0 | 1.1 | 0.1 |
| Health care | 6.4 | 6.5 | 6.7 | 7.0 | 7.2 | 7.4 | 7.7 | 1.2 |
| Long-term care | 2.8 | 3.1 | 3.3 | 4.0 | 4.3 | 4.5 | 4.9 | 2.1 |
| Education | 5.5 | 5.4 | 5.2 | 4.7 | 4.6 | 4.5 | 4.3 | -1.2 |
| Unemployment | 1.7 | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.6 | -0.1 |
| Interest expenditure | 0.8 | 0.3 | 1.0 | 3.7 | 5.2 | 6.9 | 9.0 | 8.2 |
| Total revenue | 52.2 | 50.3 | 50.7 | 51.9 | 53.0 | 54.6 | 56.3 | 4.0 |
| of which: property income | 2.9 | 2.7 | 3.0 | 4.3 | 5.5 | 7.0 | 8.5 | 5.6 |
| of which: tax revenue from pensions | 2.7 | 2.8 | 2.9 | 2.7 | 2.6 | 2.8 | 2.9 | 0.2 |
| Net lending ¹ | -1.0 | -1.6 | -2.3 | -3.8 | -3.9 | -4.9 | -6.7 | -5.7 |
| of which: transfer to pension funds | 1.1 | 0.8 | 0.8 | 2.4 | 4.2 | 5.3 | 6.2 | 5.1 |
| General government debt | 59.5 | 78.4 | 78.7 | 98.2 | 132.7 | 176.0 | 228.8 | 169.4 |
| General government assets, consolidated | 140.9 | 141.4 | 138.1 | 138.7 | 156.3 | 181.9 | 209.4 | 68.5 |
| Pension funds' financial assets, consolidated | 90.2 | 90.7 | 89.8 | 94.4 | 114.8 | 141.7 | 169.6 | 79.4 |

¹ Cyclically-adjusted net lending as of 2030

Table 30. Underlying assumptions

| | Assumptions, % | | | | | |
|---------------------------------------|----------------|--------|--------|--------|--------|--------|
| | 2025** | 2030** | 2040** | 2050** | 2060** | 2070** |
| Labour productivity growth | 0.9 | 1.3 | 1.5 | 1.5 | 1.5 | 1.5 |
| Real GDP growth | 1.2 | 1.2 | 1.5 | 1.3 | 1.2 | 1.1 |
| Participation rate | | | | | | |
| Males (15–64) | 80.3 | 80.1 | 80.5 | 81.0 | 81.3 | 82.0 |
| Females (15–64) | 77.7 | 78.4 | 79.7 | 80.7 | 81.2 | 81.5 |
| Total (15–64) | 79.1 | 79.3 | 80.1 | 80.8 | 81.3 | 81.7 |
| Unemployment rate | 6.5 | 6.6 | 6.7 | 6.6 | 6.5 | 6.4 |
| Old-age dependency ratio ¹ | 40.2 | 43.2 | 45.7 | 49.5 | 55.6 | 61.6 |
| Inflation | 1.8 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Real interest rate | -1.5 | -0.7 | 1.9 | 2.0 | 2.0 | 2.0 |
| Real return of pension assets | 1.9 | 2.4 | 3.3 | 3.5 | 3.5 | 3.5 |

¹The ratio of people aged over 65 to those aged 15–64

Sources: Statistics Finland, MoF

Table 31. Impact of various factors on the sustainability gap

| | Baseline scenario (spring 2021) | Change | Impact on sustain- ability gap, pp. ¹ |
|--|---|---|--|
| Growth in general productivity (and real earnings) in 2026-2070 | on average 1.5% | +0.5 pp. | -0.3 |
| Employment rate (15-64 yrs) in 2026-2070 | 73.8% in 2025 and 76.2% in 2070 | +1.0 pp. | -0.3 |
| Annual productivity growth of public health and social services in 2026-2070 | 0% | +0.5 pp. | -1.9 |
| General government structural primary balance ² / GDP in 2025 | -1.4% | +1.0 pp. | -1.0 |
| Total fertility rate | 1.35 | +0.35 (= 1.70) | -0.2 |
| Annual net immigration (impact if employment rate remains unchanged) | 15,000 | +7,500 (= 22,500) | -0.4 |
| Life expectancy at the age of 50 (33.6 years in 2019) | Will be increased by 7 years by 2070 | -1.4 years (= 5.6 years) | -0.5 |
| Postponement of the need for health and social services as life expectancy increases | Will be postponed by half of the life expectancy increase (people aged over 50) | Will be postponed at the rate of life expectancy increase | -1.1 |
| | | No postponement as life expectancy increases | 1.1 |
| Inflation (change in GDP deflator and consumer prices) in 2026-2070 | 2% | -0.5 pp. | approx. 0.0 |
| Real interest rate on central and local government debt (+ impact on the discount rates of the two sectors) | 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) | -0.5 pp. | -0.2 |
| 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) | | -0.5 pp. | approx. 0.0 |
| 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) | | -0.5 pp. | 0.6 |

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

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

Appendix table 1. Evolution of forecasts over time¹

| Forecast date | 2020 | | | | 2021** | | | | 2022** | | | | 2023** | | | |
|--|-------------|-------------|-------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Summer 2020 | Autumn 2020 | Winter 2020 | Outcome | Summer 2020 | Autumn 2020 | Winter 2020 | Spring 2021 | Summer 2020 | Autumn 2020 | Winter 2020 | Spring 2021 | Summer 2020 | Autumn 2020 | Winter 2020 | Spring 2021 |
| GDP at market prices, change in volume, % | -6.0 | -4.5 | -3.3 | -2.8 | 2.5 | 2.6 | 2.5 | 2.6 | 1.7 | 1.7 | 2.0 | 2.5 | – | – | 1.4 | 1.5 |
| Consumption, change in volume, % | -0.7 | -1.5 | -2.3 | -2.7 | 1.8 | 3.1 | 3.6 | 3.1 | 0.9 | 0.8 | 1.5 | 2.0 | – | – | 1.0 | 0.6 |
| Exports, change in volume, % | -14.0 | -12.5 | -10.4 | -6.6 | 5.5 | 5.3 | 5.0 | 4.6 | 3.8 | 3.8 | 4.6 | 4.7 | – | – | 2.2 | 3.7 |
| Unemployment rate, % | 8.5 | 8.0 | 7.8 | 7.8 | 9.0 | 8.2 | 8.0 | 7.8 | 8.8 | 8.0 | 7.6 | 7.2 | – | – | 7.2 | 6.9 |
| Consumer price index, change, % | 0.3 | 0.4 | 0.3 | 0.3 | 1.1 | 1.2 | 1.0 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | – | – | 1.6 | 1.7 |
| Central government net lending, relative to GDP, % | -7.3 | -7.2 | -6.1 | -5.6 | -3.4 | -4.4 | -4.9 | -5.0 | -2.8 | -3.2 | -2.8 | -2.9 | – | – | -2.4 | -2.3 |
| General government net lending, relative to GDP, % | -8.2 | -7.7 | -6.1 | -5.4 | -5.1 | -5.0 | -5.2 | -4.7 | -4.0 | -3.9 | -3.3 | -2.9 | – | – | -2.6 | -2.2 |
| Central government debt, relative to GDP, % | 54.8 | 53.3 | 53.1 | 52.6 | 55.8 | 55.6 | 55.6 | 55.3 | 56.9 | 56.6 | 56.3 | 56.1 | – | – | 57.3 | 57.6 |

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 | 1.0 | 0.5 | 1.5 |
| GDP (value) | 3.0 | 2.4 | 0.6 | 1.5 |
| Private consumption (value) | 2.5 | 1.1 | 1.4 | 2.2 |
| Current account, relative to GDP, % | -0.5 | -0.4 | -0.1 | 0.8 |
| 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 | 47.3 | 0.5 | 4.0 |
| 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 | 233 696 | 240 261 | 237 467 | 247 804 | 258 302 | 267 072 |
| Imports of goods and services | 92 746 | 95 200 | 84 240 | 89 375 | 94 499 | 99 023 |
| Total supply | 326 442 | 335 461 | 321 707 | 337 279 | 352 883 | 366 282 |
| | | | | | | |
| Exports of goods and services | 89 810 | 95 568 | 85 157 | 90 646 | 96 584 | 101 780 |
| Consumption | 177 312 | 181 701 | 178 373 | 187 120 | 194 120 | 199 070 |
| private | 123 828 | 125 944 | 120 263 | 126 161 | 131 796 | 136 220 |
| public | 53 484 | 55 757 | 58 110 | 61 215 | 62 114 | 63 082 |
| Investment | 56 108 | 57 318 | 56 041 | 56 907 | 59 937 | 62 728 |
| private | 46 141 | 46 836 | 45 164 | 45 450 | 48 488 | 51 443 |
| public | 9 967 | 10 482 | 10 877 | 11 457 | 11 449 | 11 285 |
| Total demand | 326 040 | 335 410 | 320 502 | 336 074 | 351 678 | 365 077 |
| | | | | | | |
| | At reference year 2015 prices; not additive | | | | | |
| | 2018 | 2019 | 2020 | 2021** | 2022** | 2023** |
| GDP at market prices | 227 208 | 230 101 | 223 718 | 229 548 | 235 211 | 238 721 |
| Imports of goods and services | 88 584 | 90 567 | 84 633 | 88 105 | 91 453 | 94 250 |
| Total supply | 283 621 | 288 011 | 276 934 | 285 254 | 293 271 | 298 921 |
| | | | | | | |
| Exports of goods and services | 85 844 | 91 622 | 85 586 | 89 527 | 93 708 | 97 169 |
| Consumption | 174 058 | 175 990 | 171 258 | 176 574 | 180 043 | 181 185 |
| private | 121 005 | 121 862 | 115 908 | 119 950 | 123 440 | 125 454 |
| public | 53 050 | 54 133 | 55 364 | 56 646 | 56 647 | 55 817 |
| Investment | 53 026 | 52 530 | 50 880 | 50 789 | 52 550 | 54 003 |
| private | 43 474 | 42 763 | 40 790 | 40 380 | 42 338 | 44 124 |
| public | 9 552 | 9 771 | 10 107 | 10 436 | 10 226 | 9 879 |
| Total demand | 315 477 | 320 856 | 308 605 | 319 115 | 329 304 | 336 840 |

Appendix table 4. Financial balance of the Finnish economy

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|--------------------|------|------|------|------|
| | relative to GDP, % | | | | |
| Gross investment | 22.7 | 23.3 | 24.0 | 23.9 | 23.6 |
| 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 | 12.5 | 11.9 |
| general government | 4.1 | 4.1 | 4.3 | 4.4 | 4.6 |
| Gross saving ¹ | 21.3 | 23.3 | 23.6 | 23.9 | 24.9 |
| households and non-profit institutions | 3.5 | 3.6 | 4.0 | 4.8 | 7.5 |
| non-financial corporations and financial and insurance corporations | 15.5 | 16.3 | 16.3 | 15.8 | 18.3 |
| general government | 2.3 | 3.3 | 3.4 | 3.3 | -1.0 |
| Financial surplus | -1.9 | -0.7 | -1.8 | -0.3 | 0.4 |
| households and non-profit institutions | -3.6 | -3.5 | -3.2 | -2.5 | 0.3 |
| non-financial corporations and financial and insurance corporations | 3.3 | 3.4 | 2.5 | 3.2 | 6.1 |
| general government | -1.7 | -0.7 | -0.9 | -1.0 | -5.4 |
| Statistical discrepancy | 0.0 | 0.0 | 0.2 | 0.0 | 0.5 |

¹ Incl. capital transfers (net)



MINISTRY
OF FINANCE

MINISTRY OF FINANCE

Snellmaninkatu 1 A
PO BOX 28, 00023 GOVERNMENT
Tel. +358 295 160 01
financeministry.fi

ISSN 1797-9714 (pdf)
ISBN 978-952-367-497-4 (pdf)

May 2021