



MINISTRY  
OF FINANCE

# **Economic Survey**

## Summer 2020

Economic Prospects

Publications of the Ministry of Finance – 2020:56



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# Economic Survey

Summer 2020

Ministry of Finance

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<b>Abstract</b> <p>Finland's gross domestic product is expected to contract by 6% in 2020. In addition to the exports, private consumption and private investments will also decrease. Higher public spending will support economic growth this year.</p> <p>The economy will start recovering during the second half of this year. However, the recovery will be slow because there is more economic uncertainty and consumers are more cautious about making spending decisions. Fall in housing construction is also slowing down the recovery of investments. The GDP is expected to grow by 2.5% in 2021 and by 1.7% in 2022.</p> <p>General government debt will rise rapidly this year. General government deficit will be more than eight per cent and general government debt-to-GDP ratio will exceed 70%. The imbalance between revenue and expenditure will narrow in the coming years as the temporary support measures are expiring and the economy picks up. General government finances will, however, remain substantially in the deficit as we approach the mid-2020s.</p> <p>There is a great deal of uncertainty in the economic outlook in both Finland and in the world as a whole. The assumption in the forecast is that the covid-19 pandemic will gradually fade away and that there will not be any second wave in the autumn. However, consumer confidence and Finland's economic performance remain weak as long as there is no effective coronavirus vaccine or treatment.</p>			
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<b>Tiivistelmä</b>	<p>Bruttokansantuotteen arvioidaan supistuvan 6 % v. 2020. Viennin lisäksi supistuvat yksityinen kulutus sekä yksityiset investoinnit. Julkisten menojen lisääntyminen tukee talouskasvua tänä vuonna.</p> <p>Talouden toipuminen tämän vuoden loppupuolelta alkaen on hidasta taloudenpitäjien luottamuksen laskun sekä epävarmuuden kasvun seurauksena. Investointien toipumista heikentää myös asuinrakentamisen väheneminen. BKT:n arvioidaan kasvavan 2,5 % v. 2021 ja 1,7 % v. 2022.</p> <p>Julkinen talous velkaantuu tänä vuonna erittäin nopeasti. Julkisen talouden alijäämä kasvaa yli 8 prosenttiin ja julkisyhteisöjen velka kipuaa yli 70 prosenttiin suhteessa BKT:hen. Tulojen ja menojen välinen epätasapaino pienenee lähivuosina talouden väliaikaisten tukitoimien päättyessä ja kasvun elpyessä. Julkinen talous pysyy 2020-luvun puoliväliä lähestyttäessä silti edelleen selvästi alijäämisenä.</p> <p>Talouden näkyvät niin Suomessa kuin maailmantaloudessa ovat edelleen hyvin epävarmoja. Ennusteessa on oletettu, että covid-19-epidemia hiipuu vähitellen pois ja syksyllä ei tule toista epidemia-aaltoa. Kuluttajien luottamus ja talouden toimintakyky pysyvät kuitenkin heikkoina siihen asti, kunnes sairauteen on löydetty tehokas rokote tai hoito.</p>		
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<b>Nyckelord</b>	Offentlig ekonomi, ekonomisk utveckling		
<b>Referat</b>	<p>Bruttonationalprodukten uppskattas minska med sex procent under 2020. Utöver exporten minskar även den privata konsumtionen och de privata investeringarna. Ökningen av de offentliga utgifterna stöder den ekonomiska tillväxten det här året.</p> <p>Den ekonomiska återhämtningen är från och med den senare delen av det här året långsam på grund av de ekonomiska aktörernas minskade förtroende och den ökande osäkerheten. Minskningen i bostadsbyggandet hämmar också återhämtningen inom investeringar. BNP beräknas öka med 2,5 procent under 2021 och med 1,7 procent under 2022.</p> <p>Den offentliga skulden ökar väldigt snabbt i år. Underskottet i de offentliga finanserna ökar till drygt åtta procent och den offentliga skulden ökar till 70 procent av BNP. Obalansen mellan inkomster och utgifter minskar under de närmaste åren när de temporära stödåtgärderna upphör och tillväxten kommer igång. De offentliga finanserna kommer ännu när vi närmar oss mitten av 2020-talet att ha ett stort underskott.</p> <p>De ekonomiska utsikterna är fortfarande väldigt osäkra både i Finland och inom världsekonomin. Prognosen bygger på antagandet att covid-19-epidemin klingar av och att det inte kommer en andra epidemivåg under hösten. Konsumenternas förtroende och den ekonomiska funktionsförmågan kommer emellertid att vara svaga tills ett effektivt vaccin eller en effektiv behandling har upptäckts.</p>		
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# Economic Survey Summer 2020

This survey presents projections for economic growth in the period 2020–2022. In addition to a short-term economic forecast, it also contains a medium-term projection for the Finnish economy extending to the year 2024.

The forecasts and trend projections presented in the survey have been 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 and projections are based on the details of national accounts for 2019 published by Statistics Finland in May 2020 and on other public statistics made available by 9 June 2020.

Helsinki June 2020

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## PREFACE

The world economy is staggering along in the midst of the coronavirus pandemic. Like the rest of the world, Finland has also been hard hit economically.

The pandemic broke out six months ago and the disease has spread all over the world. Over the past few months, we have learned a great deal of how the disease spreads and how it can be contained. Countries have restricted mobility and business activities to curb the spread of the disease and when there have been signs of a slowdown, some of the restrictions have been lifted.

It is not known, however, whether the measures already taken are sufficient to quell the pandemic. In many countries, the disease is still spreading and even in countries where the epidemic is on the wane, there are fears of a second wave. Moreover, it remains unclear when an effective vaccine or treatment becomes available.

For those whose task is to produce economic forecasts, the situation remains extremely uncertain. Despite all the information that has been accumulated and even though we know more about the situation than a few months ago, nobody can give a reliable estimate of how severely the global economy and Finland will be hit and how long the recession will last.

According to the forecast presented in this survey, Finland's total output will contract by 6% this year. The slowdown in export demand is now expected to be considerably more severe than previously forecast. At the same time, the forecast for domestic demand is now slightly more optimistic. The restrictions on mobility and business activities imposed in spring did not close down sectors and cut private demand to the extent feared. Moreover, public demand is supporting the economy significantly more than what was previously estimated. Private demand

will contribute about -7.5 percentage points to value added growth this year, while the contribution of public demand will be about +1.5 percentage points.

According to the forecast, the Finnish economy will begin to recover in the second half of the year. The degree of optimism among consumers and companies in Finland and globally will determine the pace of the recovery. When people are anxious about their own livelihood and afraid of the second wave of the epidemic in a situation where a vaccine or effective treatment is not yet available, consumers are not eager to spend and companies are reluctant to invest even if they were able to do so. Business investments are also slowed down by the large amount of spare capacity and the accumulation of debt in the balance sheets in the aftermath of the crisis.

The public sector has supported companies and efforts to safeguard employment in an unprecedented manner during the restrictions. The stimulus boosting total demand is also reaching substantial levels. These measures are necessary, and they will also be effective. They will help to prevent the destruction of economic output potential during the restrictions and to support the economic recovery when the restrictions are lifted.

The shock caused by the pandemic has increased the pressures and risks facing general government finances and made it less resilient. The sharp fall in output, employment and consumption as well as the substantial support and stimulus provided by general government will lead to a sharp increase in general government debt. Finland's general government deficit is expected to exceed 8 per cent and the debt about 71 of GDP this year. The rapid rise in debt-to-GDP ratio will continue after the pandemic has eased. The Finnish population is ageing, and the general government expenditure needed to provide the ageing population with services and benefits is increasing more rapidly than general government revenue.

The working groups chaired by Professor Vesa Vihriälä and Martti Hetemäki, Permanent Secretary of the Ministry of Finance, have both emphasised that in addition to stimulating total demand and launching economic reconstruction, Finland also needs measures that will stabilise general government finances in the long term.

The aim of Prime Minister Sanna Marin's Government is to stop the rise in general government debt-to-GDP ratio by the end of the decade, and it has also announced that decisions on the roadmap for strengthening general government finances will be made at the government budget session in autumn.

According to the current Ministry of Finance estimates, the aim can only be achieved if the general government budgetary position is strengthened by approximately 5 billion euros over the next decade. The sooner the measures start having an impact the better.

The aim is a challenging one and for this reason, no single measure should be ruled out. It is highly likely that, in addition to structural measures enhancing the output potential of its economy, Finland also needs measures that will boost general government revenue or reduce spending more effectively and more quickly than structural changes.

However, a fiscal discipline policy based on direct adjustment cannot be the first choice. Priority should be on overhauling economic structures in a manner that allows Finland to make more efficient and extensive use of its economic resources.

If Finland is able to substantially boost employment and the productivity of its public administration and service production, attract expertise and new technology, and enhance and maintain competitiveness of Finnish production, there is less need to cut spending and raise taxes to meet general government financing needs.

It is a question of joint decisions and implementing them. We must act now.

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.

# Contents

<b>Economic Survey Summer 2020</b> .....	6
<b>Preface</b> .....	7
<b>Summary</b> .....	13
<b>1 Economic outlook</b> .....	26
1.1 Global economy .....	26
1.2 Foreign trade .....	32
1.2.1 Exports and imports .....	32
1.2.2 Prices and current account .....	33
1.3 Domestic demand .....	35
1.3.1 Private consumption .....	35
1.3.2 Public consumption .....	38
1.3.3 Private investment .....	42
1.3.4 Public investment .....	45
1.4 Domestic production .....	45
1.4.1 Total output .....	45
1.4.2 Secondary production .....	48
1.4.3 Services .....	52
1.5 Labour force .....	58
1.6 Incomes, costs and prices .....	61
1.6.1 Wages and salaries .....	61
1.6.2 Consumer prices .....	62
<b>2 Public finances</b> .....	64
2.1 General government finances .....	64
2.2 Central government .....	73
2.3 Local government .....	76
2.4 Social security funds .....	79
<b>Boxes</b>	
GDP growth estimate for second quarter of 2020 .....	22
Confidence of the economic agents after the easing of the restrictions .....	39
Potential output after coronavirus .....	54
Fiscal stance .....	69



# Summary

## Economic outlook for 2020-2022

Finland has started lifting the restrictions introduced to contain the covid-19 epidemic in early summer, which will boost the level of economic activity, especially in the service sector. The Finnish economy will contract substantially this year as a result of the restrictions, but the measures have hit our major trading partners even harder. The Finnish economy will only recover if the outlook in the export markets improves and there is more confidence in the ability of Finland to generate growth and employment.

Finland's gross domestic product is expected to contract by 6% in 2020. In addition to the exports, private consumption and private investments will also decrease. Higher public spending will support economic growth this year.

The economy will start recovering during the second half of this year. However, the recovery will be slow because there is more economic uncertainty and consumers are more cautious about making spending decisions. Fall in housing construction is also slowing down the recovery of investments. The GDP is expected to grow by 2.5% in 2021 and by 1.7% in 2022.

General government debt will rise rapidly this year. General government deficit will be more than eight per cent and general government debt-to-GDP ratio will exceed 70%. The imbalance between revenue and expenditure will narrow in the coming years as the temporary support measures are expiring and the economy picks up. General government finances will, however, remain substantially in the deficit as we approach the mid-2020s.

## **The world economy is in deep recession**

The measures taken to contain the covid-19 pandemic and the fear of infections have led to a sharp contraction of the world economy this spring. Industrial production has been affected by disruptions in value chains but in global scale, the service sector has been particularly hard hit.

Output and employment levels have fallen sharply, and governments everywhere are rapidly accumulating large debts. Governments and central banks have taken unprecedented steps to support economies and the latest purchasing managers' indices of the key economies already suggest that the outlook is brightening. This suggests that the global economy might already start recovering during the latter half of this year. The world economy will contract by five per cent this year and in 2021, the growth will be slightly less than four per cent.

The first quarter of this year marked the low point of economic growth in China. To some extent, the country's industrial production has already returned to normal even though consumers remain cautious.

The euro area has probably been hit more severely by the pandemic than any of the other major economies. In many service sectors, production came to a near-total halt. Industrial output has also been hit by disruptions in the supply of intermediate products and components, and by a fall in demand. In May, key purchasing managers' indices already suggested that the production and demand will recover in the next few months.

In the United States, the level of economic activity has contracted sharply, and unemployment has risen at an unprecedented rate. In the United States, too, some of the preliminary indicators rose in May, which suggests that the outlook is brightening. Because of a flexible labour market, significant improvements in the employment situation can be expected during the second half of the year.

World trade will contract sharply this year. The contraction is particularly sharp in the euro area because the economies in the area are open and dependent on global value chains. The contraction will be less severe in the United States and emerging economies. However, world trade will recover after summer as the level of activity increases.



## **Private consumption will return to normal next year**

Finland's gross domestic product is expected to contract by 6% in 2020. The sharpest fall in output is expected during the second quarter, a result of domestic restrictions and a substantial decline in export demand. Short-term indicators support the assumption that the second quarter would be the year's weakest.

Finnish exports are expected to decrease by 14%, which is the single most important factor contributing to the fall in GDP. Exports volumes already decreased in the first quarter of 2020 and the downward trend has continued in the second quarter. However, many of our key trading partners have started lifting covid-19 restrictions and there are signs of an increase in the level of economic activity. As a result, exports will start picking up in the latter half of 2020.

Private consumption will decline by 3.5% in 2020. Consumption of services has been hardest hit by the restrictions on mobility and business activities prompted by the pandemic and the demand for consumer durables has collapsed. However, online commerce and the outlets selling daily consumer goods have been doing well in the exceptional situation and they have even increased their sales compared with the first months of the year. Lifting of the restrictions at the start of June will help the consumption of services to pick up in the third quarter.

Private investments will contract by more than 9% in 2020. Contraction of the world economy and Finland's export markets, and uncertainty about the future are slowing down business investments. Even though the construction sector performed slightly better than expected during the first months of the year, housing construction will decrease by 4.6% this year.

The number of employed persons will decrease more rapidly in 2020. Employment will contract by 2.5% and the employment rate will fall below 71%. Companies have adjusted their labour costs by laying off staff and making employees redundant. There has been a record increase in layoffs this spring.

There will be hundreds of thousands of people registered as jobseekers for many months to come because the number of persons registered as unemployed by the Ministry of Economic Affairs and Employment totalled 431,000 at the end of May. According to the Labour Force Survey, a substantial increase in the number of unemployed can be expected. Decrease in employment and the large number of layoffs will increase the unemployment rate to 8.5%.

A large number of new collective agreements have been concluded in the first months of the year. On average, nominal wages will rise by slightly less than 1.5% under the agreements. Earnings will increase by 1.6% this year and wage drifts will be small.

Measured with the consumer price index, an inflation rate of 0.3% is forecast for 2020. Substantial decrease in consumer demand and an uncertain economic outlook will also slow down inflation in the coming years.

The years 2021 and 2022 can be characterised as the years of recovery. The GDP is expected to grow by 2.5% in 2021 and by 1.7% in 2022. Private consumption will recover more rapidly than the other areas of consumption. Consumption of goods and most services will return to normal levels by early 2021. Travel-related services are the slowest to recover.

Private investments will pick up and grow slightly in 2021. Stronger demand both domestically and internationally towards the end of the forecast period will boost investments in machinery and equipment. Moreover, speedy progress in least one major industrial project seems likely. Research and development expenditure will fall at the start of the forecast period but will then increase throughout the period. Government R&D funding will increase in 2020 and 2021.

Construction starts are expected to be postponed and housing starts will probably be reduced by several thousand until 2021, which will also reduce housing construction in 2021. After that, housing starts will gradually approach the long-term average (nearly 32,000 starts each year).

Global uncertainty about the second wave of infections is slowing down export recovery, and export volumes will only reach pre-covid-19 levels at the end of the review period. Service exports will recover more slowly than the exports of goods.

Higher level of economic activity and employment will probably lead to higher wage drifts in 2021 and 2022. Moreover, the private and public sector wage rises agreed for 2021 are about 0.5 percentage points higher. Nominal earnings will rise by 2.5% in 2021.

The national consumer price index is expected to rise by 1.1% in 2021 and by 1.4% in 2022. Tax increases targeting consumption will boost inflation in both years, particularly in 2021.

**Table 1. Key forecast figures**

	2019	2017	2018	2019	2020**	2021**	2022**
	EUR bn	change in volume, %					
GDP at market prices	240	3.1	1.6	0.9	-6.0	2.5	1.7
Imports	95	4.1	5.5	2.2	-8.6	3.4	2.6
<b>Total supply</b>	<b>335</b>	<b>3.4</b>	<b>2.7</b>	<b>1.3</b>	<b>-6.8</b>	<b>2.8</b>	<b>1.9</b>
Exports	96	8.8	1.7	7.2	-14.0	5.5	3.8
Consumption	182	0.6	1.9	0.9	-0.7	1.8	0.9
private	126	1.0	1.8	1.0	-3.5	3.5	1.4
public	55	-0.2	2.1	0.9	5.9	-1.6	-0.1
Investment	57	4.0	3.7	-0.8	-6.1	0.3	2.2
private	47	4.8	3.5	-1.0	-9.2	0.3	3.4
public	10	0.2	5.0	0.3	8.0	0.3	-2.7
<b>Total demand</b>	<b>335</b>	<b>3.4</b>	<b>2.6</b>	<b>1.8</b>	<b>-6.5</b>	<b>3.0</b>	<b>2.2</b>
domestic demand	239	1.5	2.9	-0.3	-3.5	2.2	1.6

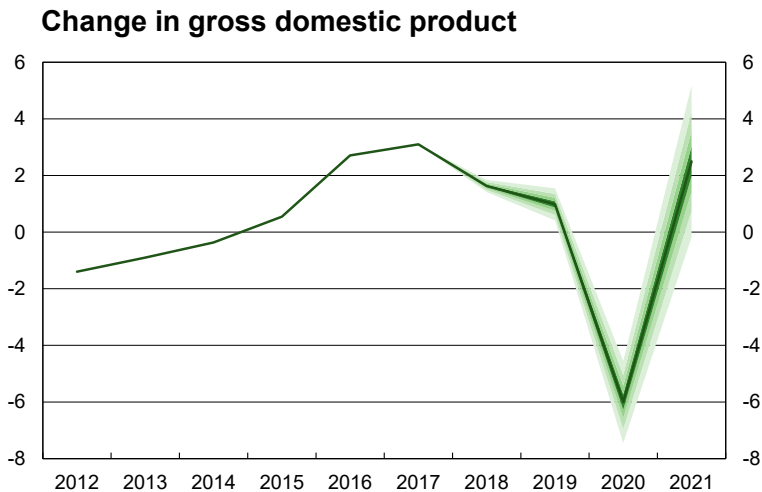
**Table 2. Other key forecast figures**

	2017	2018	2019	2020**	2021**	2022**
GDP, EUR bn	226	234	240	228	237	245
Services, change in volume, %	2.5	2.5	1.5	-5.4	2.8	1.5
Industry, change in volume, %	8.4	-1.6	1.0	-9.1	4.3	3.6
Labour productivity, change, %	2.9	-0.8	0.3	-1.2	1.3	1.5
Employed labour force, change, %	1.1	2.6	1.1	-2.5	-0.5	0.5
Employment rate, %	69.6	71.7	72.5	70.8	70.7	71.1
Unemployment rate, %	8.6	7.4	6.7	8.5	9.0	8.8
Consumer price index, change, %	0.7	1.1	1.0	0.3	1.1	1.4
Index of wage and salary earnings, change, %	0.2	1.7	2.2	1.6	2.5	2.0
Current account, EUR bn	-1.7	-3.8	-1.8	-7.1	-5.3	-4.4
Current account, relative to GDP, %	-0.8	-1.6	-0.8	-3.1	-2.2	-1.8
Short-term interest rates (3-month Euribor), %	-0.3	-0.3	-0.4	-0.3	-0.2	-0.1
Long-term interest rates (10-year govt. bonds), %	0.5	0.7	0.1	-0.1	-0.1	0.0
General government expenditure, relative to GDP, %	53.8	53.4	53.3	61.4	58.3	57.0
Tax ratio, relative to GDP, %	42.9	42.4	42.1	42.9	43.1	42.9
General government net lending, relative to GDP, %	-0.7	-0.9	-1.1	-8.2	-5.1	-4.0
Central government net lending, relative to GDP, %	-1.8	-1.2	-1.2	-7.3	-3.4	-2.8
General government gross debt, relative to GDP, %	61.3	59.6	59.4	71.3	73.5	75.5
Central government debt, relative to GDP, %	46.8	44.9	44.3	54.8	55.8	56.9

## Uncertainty about the pandemic is reflected in the uncertainty of the economic outlook

There is a great deal of uncertainty in the economic outlook in both Finland and in the world as a whole. The assumption in the forecast is that the covid-19 pandemic will gradually fade away and that there will not be any second wave in the autumn. Consumer confidence and Finland's economic performance remain weak as long as there is no effective coronavirus treatment or vaccine.

Figure X shows the uncertainty of economic forecasts as a confidence interval based on past forecasting errors and built around the forecast. According to this confidence interval, there is a probability of 80% that GDP growth will be between -7.5% and -4.5% this year. The confidence interval for the next year's forecast is wider. With 80 % probability GDP growth is expected to be between -0.2% and 5% in 2021. The economic growth rate may also fall outside the confidence interval, especially because the estimates of this year's growth are associated with an unprecedented degree of uncertainty.



A new outbreak of the covid-19 epidemic is the key downside risk in the forecast. The economic impacts of the second wave would depend on the public sector measures to contain the epidemic and to support the economy and the impacts of these measures on consumers making spending decisions. If the economy has not yet fully recovered before the second wave, the contraction may be less serious than what was experienced in spring. However, in that case, the economic growth potential will be more limited, and the crisis will have longer-term impacts. The long-term impacts of the covid-19 pandemic on potential output are assessed in the box on page 54.

Prolonged demand recession affecting capital goods is the key risk presented in the forecast. Traditionally, Finland has suffered more from global economic downturns than many other countries as capital goods account for a relatively large proportion of Finnish exports and the demand for them usually picks up more slowly than the demand for consumer goods. For this reason, Finnish industries may recover substantially more slowly than forecast.

The positive risk means that there may be a stronger and more rapid recovery of service demand both domestically and internationally, especially as substantial measures to stimulate production and demand have been initiated by such bodies as the EU. The implementation of these measures as well as the economic stimulus package presented by the Finnish Government in June will have a positive impact on production in Finland and elsewhere this year and in 2021.

### **General government debt is rising rapidly**

Finland's general government debt will grow by about EUR 20 billion this year, to more than 71% of its gross domestic product. The downturn is weakening general government finances, dealing with the covid-19 epidemic requires substantial public-sector inputs, and the exceptional situation has prompted central government to provide companies and employment with substantial support. Stimulus measures boosting economic growth are also increasing public spending.

The gap between general government revenue and expenditure will grow to more than 8% of GDP this year. Of the general government sectors, central government will be hardest hit by the crisis. Central government is responsible for the economic support measures and with its support packages, it will soften the impacts of the epidemic and the downturn on local government finances.

The gap between revenue and expenditure will narrow in the coming years but general government finances will remain substantially in the deficit as we approach the mid-2020s. If no measures to strengthen general government finances are taken, the general government debt-to-GDP ratio will also continue to grow after mid-2020s.

## Medium-term outlook for the period 2023 – 2024

Finland's gross domestic product grew by 0.9% in 2019. As a result of the covid-19 pandemic and the measures taken to contain it, the Finnish economy will contract sharply this year. There will be partial recovery between 2020 and 2022 but total output will remain below pre-crisis levels. In the medium term (in the years 2023 and 2024), economic growth will slow down but will nevertheless substantially exceed potential output growth<sup>1</sup>.

A reduction in labour input will weaken potential output, especially during this year. In the coming years, labour input will decline further 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. As a result of the downturn, unemployment will grow and may partially turn into a structural problem as unemployment periods become longer.

In addition to labour input, the production conditions of the economy are also influenced by the capital stock. As a result of the downturn and uncertain outlook, investment rate will fall, which will slow down potential output growth. Growth in capital stock will boost potential output by less than 0.5% each year.

Total factor productivity is the third source of potential output growth. It has been growing more rapidly in recent years even though in historic terms, growth remains weak. The weak growth can be explained by the 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 about 0.5% in the medium term compared with an average annual growth of more than two per cent in the early years of the 2000s.

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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.

The positive output gap is expected become highly negative this year. The negative output gap will narrow in the coming years as the economy is growing faster than potential output. However, in the aftermath of the downturn, the output gap will probably be so wide that it will only close after 2024. In the medium term, economic growth will slow down and approach the rate of potential output growth. Economic growth will slow down because in the medium term, potential output will grow more slowly than in the past. The downturn will slow down potential output growth as a result of lower investment levels and rising unemployment. Furthermore, the decline in working-age population will also gradually slow down growth in the medium term.

**Table 3. Key forecast figures for the medium term**

	2019	2020**	2021**	2022**	2023**	2024**
GDP at market prices, change in volume, %	0.9	-6.0	2.5	1.7	1.4	1.2
GDP, EUR bn	240	228	237	245	253	262
Consumer price index, change, %	1.0	0.3	1.1	1.4	1.5	1.6
Unemployment rate, %	6.7	8.5	9.0	8.8	8.5	8.3
Employment rate, %	72.5	70.8	70.7	71.1	71.5	71.8
General government net lending, relative to GDP, %	-1.1	-8.2	-5.1	-4.0	-3.5	-3.2
Central government	-1.2	-7.3	-3.4	-2.8	-2.5	-2.2
Local government	-1.2	-0.7	-1.8	-1.4	-1.3	-1.3
Social security funds	1.2	-0.2	0.1	0.2	0.3	0.3
Structural balance, relative to GDP, %	-2.2	-5.5	-3.5	-3.0	-2.9	-3.0
General government gross debt, relative to GDP, %	59.4	71.3	73.5	75.5	77.4	78.7
Central government debt, relative to GDP, %	44.3	54.8	55.8	56.9	58.0	58.6
Output gap, % of potential output <sup>1</sup>	1.6	-4.7	-2.8	-1.8	-1.0	-0.3

<sup>1</sup> Estimated according the method developed jointly by the EU Commission and Member States

## **GDP GROWTH ESTIMATE FOR SECOND QUARTER OF 2020**

The quarterly accounts used in GDP forecasts are usually completed with substantial delays, which makes it difficult to use the data contained in them when estimating the economic situation at any given moment. Information on the current situation can be obtained by examining readily available data. The data and the model results presented in this box are used as a basis for producing an accurate and up-to-date picture of GDP growth in the second quarter of 2020.

The impacts of the coronavirus pandemic have been more extensive than assumed by the Ministry of Finance in its March forecast. Growth forecasts for the global economy have been further lowered and it is also clear that partial restrictions will remain in effect in Finland and in many other countries until the autumn. The assumption in this forecast is that there will be a further reduction in the number of new infections and that the pandemic will gradually fade away. However, a full economic recovery can only take place when an effective vaccine or treatment becomes available.

### **1. Estimating GDP using readily available data**

Up-to-date data on activities in Finnish ports and airports is readily available. It can be used to assess trends in foreign trade and to supplement the picture of economic activity. In recent years, about 90% of Finnish goods exports and 80% of its goods imports have passed through the country's ports. The total number of ships calling at Finnish ports each day is entered in the Port Net system used by Finnish Customs. According to seasonally unadjusted figures, the number of ships calling at Finnish ports in April was 10% lower than in the same period in 2019. In May and in the beginning of June there were no signs of substantial recovery in port activity. According to Finavia, the amount of freight carried in international air traffic in April and May was as much as 50-60% lower than a year before.

Information on the level of economic activity can also be obtained on the basis of road traffic volumes. The statistics on road traffic volumes collected by the Finnish Transport Infrastructure Agency contain information on the movements of people and goods. In April, traffic volumes were nearly 34% lower than in the same period last year. In the first five months of 2020, traffic on main roads decreased by about 14% year-on-year. The changes in heavy traffic were smaller: in April, volumes fell by 11% and in the period January - May by 6%. At the end of May, total traffic volumes were lower than in the same period in 2019 but the fall was no longer as sharp as in April.

According to the business tendency survey published by the Confederation of Finnish Industries in April, expectations among enterprises are extremely weak. Companies taking part in the survey estimated that the second quarter will be their weakest in terms of output, and the indicator figure for the third quarter was almost as weak. The service sector was particularly pessimistic in its outlook: the index value for the second quarter of 2020 was -60. The confidence indicator data collected during May was slightly



more optimistic even though there was further weakening of expectations among manufacturing companies.

Even though the confidence indicators suggest that the outlook for May is better than for April, the figures collected by Accountor show that invoicing by SMEs during the first half of May was even lower than in April. During the month of May, manufacturing and construction companies also experienced a sharper fall in invoicing, and the smallest SMEs have been particularly hard hit. At the same time, many other sectors experienced their sharpest falls in April and the decline slowed down in May.

Stock exchange trends also provide real-time information about the uncertainties prevailing in the economy. There was a sharp rise in the OMX index volatility of the Helsinki Stock Exchange in early March, but it has fallen rapidly towards the beginning of June. Share indices have also recovered. The OMX Helsinki 25 share index now stands at about 3,900 (in early March, it was below 3,000 at one point). In an uncertain economic situation, companies may postpone investment decisions and the current volatility in the stock markets shows that the operating environment remains uncertain.

Using Incomes Register data as a basis, Helsinki GSE Situation Room has assessed trends in wages and turnover by sector. After analysing the data, HSGE has concluded that there were few changes in wage payments in the period January - mid-April 2020 compared with the same period in 2019. Since mid-April, growth in earnings has been slower than during the first months of the year. It is estimated that in April, the increase in the total wage bill was five per cent slower year-on-year. In May, the trend continued to decline at the same pace than in April.

Information on private consumption can be obtained on the basis of card payment data. According to the card payment data collected by the Nordea Bank, there was further increase in consumption during May. In euro terms, the volume of card payments between 25 and 31 May 2020 was about the same as before the coronavirus crisis and higher than in April (when the volume was about 25% lower).

Mobile data collected by Google that has been anonymised provides day-to-day information about the mobility of Finns during the coronavirus pandemic. There has been a clear increase in mobility after the easing of the restrictions. Early June, the number of customers in grocery stores and pharmacies was still three per cent lower compared with the normal levels of late January/early February (on 16 May 2020, the total was -10%). However, the number of visitors in shopping centres and places of recreation was still about 23% lower than in late January/early February but significantly higher than three weeks earlier (-35%). There has been an even sharper fall in the use of public transport hubs: about -32% (on 16 May 2020, the total was -50%). Thus, the above figures show that there has been a marked increase in mobility. The latest figures are from 6 June 2020.

The readily available data presented above shows that April will remain the month with the weakest economic growth during the second quarter (due to the uncertainties affecting the markets and private consumption). Indicators for May already suggest a slight recovery even though, year-on-year, the trend is still negative. On a quarterly basis, the second quarter will remain the period with the weakest economic growth in 2020.

## 2. Examining models

The GDP growth forecast presented in this survey is based on a vector autoregressive model containing five variables. The GDP trend indicator and the confidence indicators of manufacturing, construction, services and consumers are used as variables as there is monthly data available on all of them. Based on the information criteria, two types of time delay were selected for the model, which means that there is little autocorrelation of the error terms in the model. The correlations between the selected variables are quite large as shown in the table below and for this reason, using them in the model is justified. For example, the correlation between the GDP trend indicator and the construction-sector confidence indicator stood at 0.74 during the period in review. The five indicators selected cover almost the entire production sector, which was also a factor in favour of using them as variables.

Table 1: Correlation examination (2007-2020m3)<sup>1</sup>

	BKTSK	CONSCONF	KULUTCONF	MANUCONF	SERVCONF
BKTSK	1.000000	0.739097	0.234849	0.605937	0.642342
CONSCONF	0.739097	1.000000	0.355505	0.792061	0.757859
KULUTCONF	0.234849	0.355505	1.000000	0.631531	0.639738
MANUCONF	0.605937	0.792061	0.631531	1.000000	0.859096
SERVCONF	0.642342	0.757859	0.639738	0.859096	1.000000

<sup>1</sup> BKTSK=GDP trend indicator, CONSCONF=construction confidence indicator, KULUTCONF=consumer confidence indicator, MANUCONF=manufacturing confidence indicator, SERVCONF=service-sector confidence indicator.

The estimation covers the period between 2007 and March 2020. The model estimated for the period 2007-2017 was tested in the forecasting of trends in 2018 and 2019. The model was fairly accurate in forecasting trends in the first year after which its accuracy deteriorated substantially. Of the other variables used in the model, the value for May is already known (except for the GDP trend indicator). Its value for May has been determined using a single-equation regression model, with VAR model confidence indicator variables as independent variables.

The results of the model are similar to the data produced by the above material. This model, too, suggests that the contraction of the Finnish economy would be sharpest during the second quarter of this year (on a quarter-on-quarter basis). According to the model, growth will not yet resume during the third quarter. This is because the model structure is based on historical relations. However, the coronavirus pandemic is a unique disruption and the economic recovery will not necessarily take place in the same way as in the past.

**Figure 1: Model forecast for GDP trend indicator and its 95 per cent confidence intervals**



A vector autoregressive factor model is also used to estimate how severely the Finnish economy has been hit. In the factor model, turnover figures of the main sectors (until the end of February 2020) and the estimated changes in turnover in March and April (given in business tendency surveys) are used as variables. Based on this model, economic growth would slow down substantially more than what is indicated in the previous VAR model. In the factor model, GDP in June would be about 9% lower year-on-year (in the VAR model, the decrease was 6%).

**Table 2: Quarter-on-quarter change of GDP trend indicator (VAR model) and GDP (FVAR model) in the model forecasts, %**

	VAR-model <sup>1</sup>	FVAR model
Q2	-6,5...-4,6	-7,2

<sup>1</sup> The figures show quarter-on-quarter changes estimated on the basis of the lower limit and average of the confidence interval estimated for the May forecast.

**Sources**

- Accountor and August
- Confederation of Finnish Industries EK: Confidence indicator, May 2020
- Confederation of Finnish Industries EK: Business Tendency Survey, April 2020
- Google: <https://www.google.com/covid19/mobility/>
- Helsinki GSE Situation Room
- Nordea Bank: Nordea corona indicator
- Statistics Finland: Official Statistics of Finland
- Finnish Customs: Port Net system
- Finnish Transport Infrastructure Agency: traffic on main roads

# 1 Economic outlook

## 1.1 Global economy

### **The world economy is in a deep recession but there are signs of a recovery**

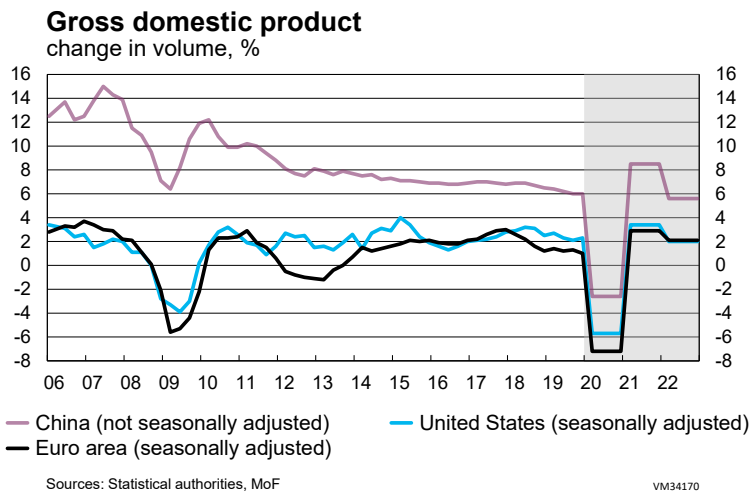
The covid-19 pandemic has driven the world economy into a deep recession. According to some estimates, the situation is worse than at any time since the depression of the 1930s. The measures taken to contain the pandemic and the fear of infections have led to a sharp fall in the level of economic activity this spring. Industrial production has been affected by disruptions in value chains but in global scale, but the service sector has been particularly hard hit. There has been a rapid weakening of the employment situation and public debt has increased sharply in many countries.

However, the purchasing managers' indices of key economies compiled in May already indicated that the outlook is brightening. This suggests that the global economy might already start recovering during the latter half of this year. However, at annual level, contraction of total output is unprecedented. The world economy will contract by about five per cent this year and in 2021, the growth will be slightly less than four per cent.

The first quarter of this year marked the worst phase in China. However, tight restrictions led to a rapid fall in new infections and as a result, the economy could already be opened to a degree in early spring. To some extent, industrial production has returned to normal even though consumers remain cautious. The Chinese economy will contract by 2.6% this year. Next year, the economy will bounce back, growing at a rate of 8.5%.

The euro area has perhaps been hit more severely by the crisis than any of the other major economies. In many service sectors, activities practically came to a halt in March and April. Industrial output has also contracted as a result of disruptions in the supply of intermediate products and components. The situation in Italy has been particularly difficult. However, tight restrictions and adherence to them have helped to quell the pandemic. In May, key purchasing managers' indices already suggested that some recovery can be expected in the next few months. At annual level, the euro area economy will contract by 7.2% this year and grow by 2.9% in 2021.

The United States was hit by the full force of the pandemic later than Europe. The number of infections is the highest in the world and in relation to the population, the United States is also one of the worst-hit countries. The level of activity has contracted sharply, and unemployment has risen at an unprecedented rate. In the United States, too, some of the leading indicators rose in May, which suggests that the outlook is brightening. Because of a flexible labour market, an improvement in the employment situation is expected towards the end of the year. Total output will shrink by 5.7% this year, followed by a growth of 2.9% in 2021.

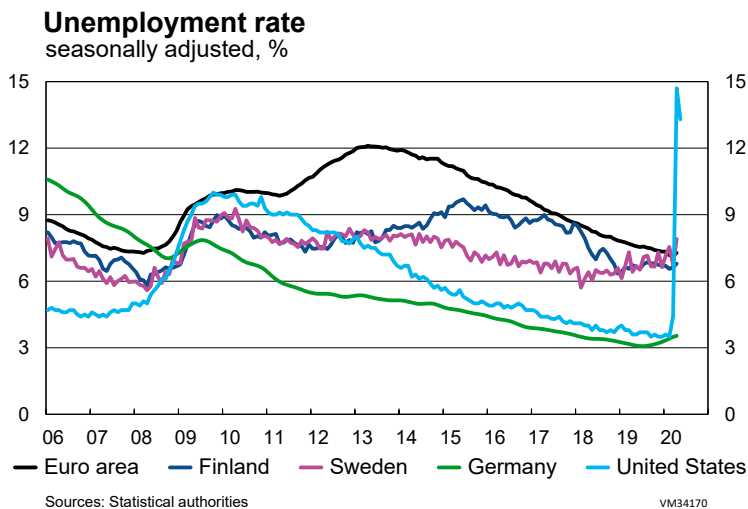


In Japan, the impact of the pandemic has been relatively limited, but the prospects are weakened by an overall economic stagnation. Ageing of the population and weak productivity growth will keep potential output growth at modest levels. Total output will fall by 5% this year and will grow at an annual rate of less than one per cent in the forecast period.

In the United Kingdom, the prospects are dampened by deadlocked Brexit negotiations. The economy has also been severely hit by the covid-19 crisis. Total output will contract by 8.5% this year. Growth will be around 1.5% in the forecast period.

In Russia, the economic outlook is dampened by the low price of the crude oil and the opening of the economy during the acute stage of the pandemic. Mining and manufacturing industries have been doing particularly poorly during the first half of the year. Consumers are cautious during the pandemic. Total output will shrink by 6.3% this year, followed by modest growth in 2021 and 2022.

Restrictions in Sweden have been less stringent than in other countries, but it seems that despite a more relaxed approach, the country's economy is not doing significantly better. Total output contracted during the first quarter of this year quarter-to-quarter, though not as much as in Denmark and Norway. Total output will contract by 5.5% this year and a growth rate of 1.9% is expected in 2021.

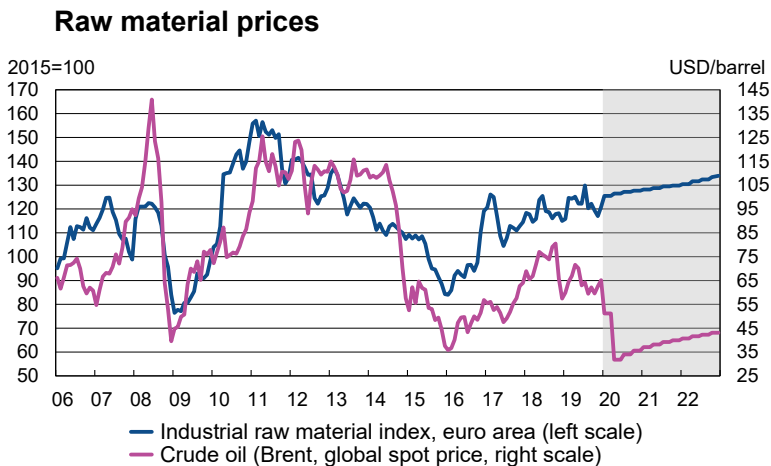


### Moderate rise in interest rates is expected in the coming years

Because of the exceptional circumstances and substantial support measures by key central banks, interest rates are only expected to rise moderately in the next few years. There are hardly any of higher inflation. There is danger that risk premiums of certain government bonds will increase if confidence in the economic performance of these countries starts to erode.

## Raw material prices have fallen as a result of oversupply and sluggish demand but moderate increases are expected

Crude oil prices have fluctuated sharply this year. The prices collapsed in March, mainly as a result of weaker demand in China and global oversupply. Since then, the prices have recovered slightly. Crude oil price futures suggest that the prices will rise moderately this year and in the next few years.



Sources: Hamburgisches WeltWirtschafts Institut, Macrobond, MoF

VM34170

After falling during the crisis, industrial raw material prices recovered in May as the economic outlook improved. As economic growth accelerates, the prices will rise moderately during the forecast period.

## World trade will contract sharply as a result of the pandemic but will start recovering in the second half of this year

World trade will contract sharply as a result of the covid-19 pandemic and the measures taken to contain it. The contraction is particularly sharp in the euro area because the economies in the area are open and dependent on global value chains. Contraction will be less severe in the United States and emerging economies. However, world trade will recover after summer as the level of activity increases. In 2020 as a whole, world trade in goods will contract by 9.5% but will grow by almost 6% next year.



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

### Risks are skewed to the downside

Risks in the global economy and world trade are now increasingly skewed to the downside. A second wave of the pandemic and the reintroduction of restrictions as a result are the key risks. The collapse of the negotiations between the United Kingdom and the EU would lead to a hard Brexit. The tensions between China and the United States are heightening the global geopolitical situation.

Faster than expected suppression of the pandemic would be the most important upside risk.



**Table 4. Gross domestic product**

	2017	2018	2019	2020**	2021**	2022**
	change in volume, %					
World (PPP)	3.8	3.6	2.9	-5.1	3.8	2.8
Euro area	2.7	1.9	1.2	-7.2	2.9	2.1
EU	2.5	1.9	1.3	-6.9	2.6	1.9
Germany	2.8	1.5	0.6	-6.8	3.1	2.2
France	2.4	1.8	1.3	-7.5	2.8	1.9
Sweden	2.7	2.4	1.3	-5.5	1.9	2.0
United Kingdom	1.9	1.3	1.3	-8.5	1.3	1.4
United States	2.4	2.9	2.3	-5.7	3.4	2.0
Japan	3.2	0.3	0.7	-5.0	0.9	0.8
China	6.9	6.7	6.1	-2.6	8.5	5.6
India <sup>1</sup>	6.6	6.8	5.3	-1.5	5.5	6.1
Russia	1.8	2.5	1.3	-6.3	1.3	1.3

<sup>1</sup> Fiscal year

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

**Table 5. Background assumptions**

	2017	2018	2019	2020**	2021**	2022**
World trade growth, %	5.3	3.8	-0.4	-9.4	5.9	3.3
USD/EUR	1.13	1.18	1.12	1.09	1.09	1.09
Industrial raw material price index, EA, € (2015=100)	114.5	118.5	122.1	112.2	118.5	124.5
Crude oil (Brent), \$/barrel	54.8	71.6	64.1	38.1	38.6	41.9
3-month Euribor, %	-0.3	-0.3	-0.4	-0.3	-0.2	-0.1
Government bonds (10-year), %	0.5	0.7	0.1	-0.1	-0.1	0.0
Export market share (2010=100) <sup>1</sup>	95.0	93.0	100.0	95.0	95.0	95.0
Import prices, %	3.8	3.4	0.3	-1.8	1.0	1.7

<sup>1</sup> Ratio of export growth to world trade growth

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

## 1.2 Foreign trade

World trade contracted sharply during the first half of 2020. Supply of industrial intermediate products and components, transport connections and lower demand are causing a fall in output and foreign trade in Finland and the rest of the world. Tight restrictions and uncertainty have reduced mobility of people and dampened business prospects, and the impacts of the covid-19 pandemic are also reflected in lower service exports and imports.

### 1.2.1 Exports and imports

Finland's export demand will fall by 12.1 % in 2020. Europe accounts for a large proportion of Finnish exports and the level of economic activity has also fallen substantially in other key export markets during the first half of the year. As a result, the demand for Finnish exports will contract more than the world trade.

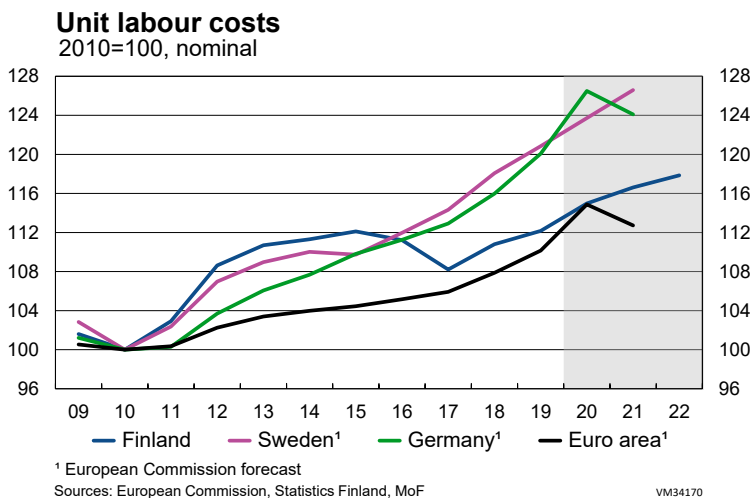
Finnish exports will fall by 14 % in 2020 and grow by 5.5 % in 2021. The volume of both goods and service exports decreased during the first quarter of 2020 and the downward trend has continued during the second quarter. However, many countries have started lifting covid-19 restrictions and there are signs of an increase in the level of economic activity. As a result, exports will start picking up in the latter half of 2020. Global uncertainty of the second wave of infections is, however, slowing down export recovery and export volumes will remain below the pre-covid-19 levels throughout the review period.

Most of the goods exports are supplied to meet industrial production needs, while capital goods and transport equipment have accounted for about one third of the value of Finnish exports in recent years. For this reason, the recovery of industries in our key trading partners is essential for Finland's exports. Typically, in a downturn, the demand for capital goods recovers more slowly than the demand for consumer products. At the same time, exports of services will not fall as sharply as goods exports even though tourism exports more or less came to a halt in early 2020 and the recovery will be slow. ICT and business services are the largest items in Finland's service exports, and they are less severely affected by the crisis than sectors that are directly hit by restrictions on mobility.

Volume of imports will contract by 8.6 % in 2020. Imports of goods already started to decline in 2019 and service imports also contracted in the first quarter of 2020. Lower output in export companies will also reduce demand for imported components. Fall in domestic consumption and restrictions on mobility have a negative impact on imports but an upturn in consumption during the latter half of the year will also help imports to recover. Imports will grow by 3.4% in 2021 and the positive trend will continue throughout the review period.

**Table 6. Foreign trade**

	2017	2018	2019	2020**	2021**	2022**
	<b>change in volume, %</b>					
Exports of goods and services	8.8	1.7	7.2	-14.0	5.5	3.8
Imports of goods and services	4.1	5.5	2.2	-8.6	3.4	2.6
	<b>change in price, %</b>					
Exports of goods and services	3.3	4.2	-0.7	-2.0	1.3	1.7
Imports of goods and services	3.8	3.4	0.3	-1.8	1.0	1.7



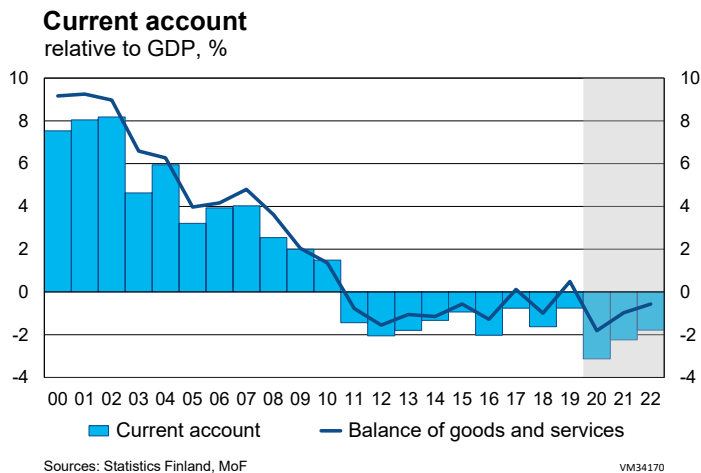
## 1.2.2 Prices and current account

Last year, import prices were boosted by a moderate rise in the prices of service imports. There was also a slight rise in import prices in the first quarter of 2020, which means that the fall in raw material and crude oil prices during the early months of the year was not yet reflected in their prices during the first quarter. Even

though there were some signs of higher raw material and crude oil prices in May, import prices will contract in 2020 year-on-year.

Terms of trade weakened substantially during the first quarter as prices of export goods and services decreased. This was in line with the downward trend in export prices, which had started in 2019. Both export and import prices will pick up again in 2021 and the positive trend will continue towards the end of the review period. There will not be any significant weakening in the terms of trade towards the end of the forecast period.

The value of exports and imports will decrease during the review period, a result of a fall in volumes and prices. In 2020, the value of exports will fall faster than the value of imports, which will widen the current account deficit. The current account deficit will widen in 2020 and it will persist throughout the review period.



**Table 7. Current account**

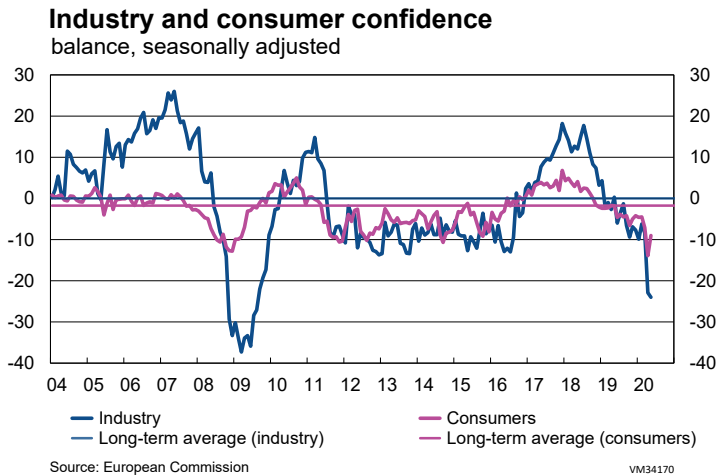
	2017	2018	2019	2020**	2021**	2022**
	EUR bn					
Balance of goods and services	0.3	-2.3	1.2	-4.1	-2.3	-1.4
Factor incomes and income transfers, net	-2.0	-1.5	-3.0	-3.0	-3.0	-3.0
Current account	-1.7	-3.8	-1.8	-7.1	-5.3	-4.4
Current account, relative to GDP, %	-0.8	-1.6	-0.8	-3.1	-2.2	-1.8

## 1.3 Domestic demand

### 1.3.1 Private consumption

#### Private consumption will recover quickly

In the first quarter of 2020, private consumption decreased by 0.6% quarter-to-quarter but remained at the same level as in the first quarter of 2019. The covid-19 pandemic did not have any major impact on consumption during the first quarter. However, the mild winter significantly reduced the purchases of winter clothing and footwear and as a result, the consumption of semi-durables fell by more than six per cent year-on-year.

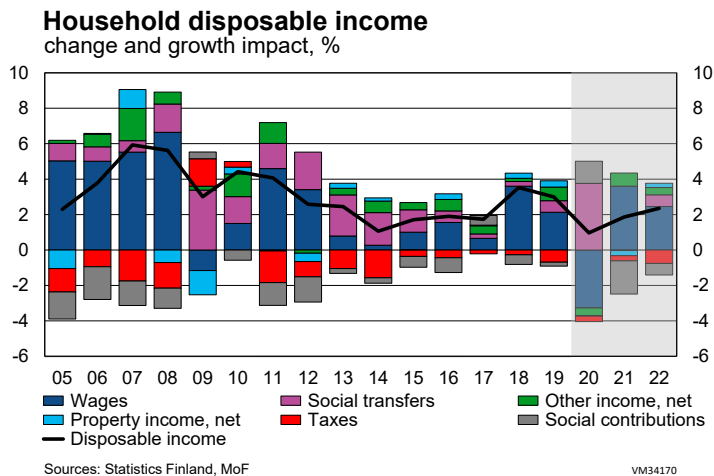


The full impact of the pandemic on consumption was not felt until April 2020 when retail trade turnover decreased by almost 6% year-on-year. First registrations of passenger cars fell by nearly 40% in April and by more than 50% in May, compared with the same period in 2019. At the same time, however, the payment card data collected by banks indicates that consumption recovered slightly in May. Online commerce and daily consumer goods trade have been doing well during the exceptional situation and they have even increased their sales compared with the first months of the year.

Consumption of services has been hardest hit by the emergency measures introduced as a result of the pandemic. The payment card data compiled by Nordea Bank indicates that in the second quarter, consumption fell particularly sharply in accommodation and catering services, public transport and cultural services.

Restaurants opened at the start of June, and as a result, the consumption of services is expected to pick up already during the third quarter. However, the recovery will be slow, especially in travel-related services and for this reason, service consumption is expected to contract by 4.7% in 2020.

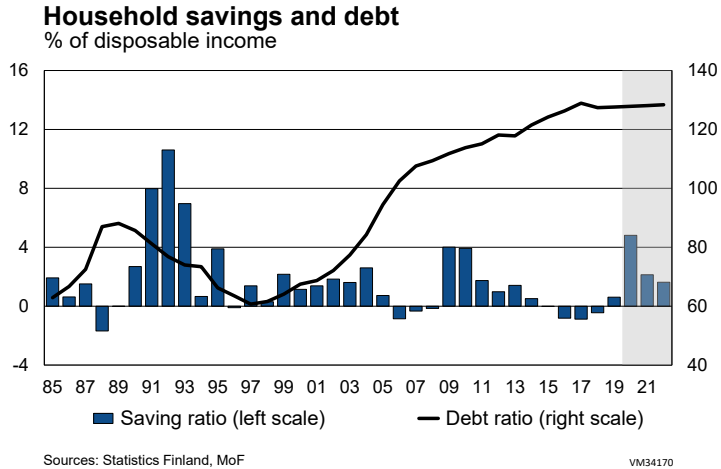
Purchases of durables are often postponed when consumer confidence falls. As more people are laid off and as other economic uncertainties increase, consumption of durables is expected to decrease by 10% this year. Consumption of durables will not return to normal levels until early 2021.



Consumption of semi-durables is expected to fall by 5% this year as a result of the weak first months and a decrease in purchasing power caused by layoffs. However, the consumption of clothing and footwear is expected to return to normal levels during the second half of the year.

The pandemic is not expected to have any negative effects on the consumption of non-durable goods, such as foodstuffs, even though the consumption of fuels will remain slightly below normal levels in the second quarter. Consumption of non-durables will grow by just over one per cent this year, as daily consumer goods trade has benefited from the closure of restaurants during the second quarter.

In overall terms, private consumption will decline by 3.5 % in 2020. By comparison, when the financial crisis hit Finland in 2009, private consumption fell by 2.9%. In 2021, private consumption is expected to grow by 3.5% as consumption returns to normal levels. In 2022, the growth of private consumption will slow down to 1.4%.



**Table 8. Consumption**

	2019	2017	2018	2019	2020**	2021**	2022**
	share, %	change in volume, %					
Private consumption	100.0	1.0	1.8	1.0	-3.5	3.5	1.4
Households	95.2	1.1	1.9	0.9	-3.5	3.6	1.5
Durables	7.6	4.0	5.1	1.7	-10.2	8.8	3.4
Semi-durables	7.5	2.1	2.3	2.5	-4.8	3.4	2.0
Non-durable goods	27.2	-0.2	0.2	0.4	1.3	0.3	0.7
Services	52.9	1.8	2.4	1.0	-4.7	4.6	1.5
Consumption by non-profit institutions	4.3	-1.2	-2.3	2.5	-3.5	2.0	1.0
Public consumption		-0.2	2.1	0.9	5.9	-1.6	-0.1
<b>Total</b>		<b>0.6</b>	<b>1.9</b>	<b>0.9</b>	<b>-0.7</b>	<b>1.8</b>	<b>0.9</b>
Individual consumption expenditure in general government		-0.3	1.8	1.0	4.5	-0.1	0.1
Total individual consumption expenditure		0.7	1.8	1.0	-1.7	2.6	1.1
Households' disposable income		1.7	3.5	3.0	1.0	1.9	2.4
Private consumption deflator		0.7	1.2	1.1	0.3	1.1	1.4
Households' real disposable income		1.0	2.3	1.9	0.7	0.8	0.9
		%					
Consumption as proportion of GDP (at current prices)		76.0	75.8	75.7	79.9	79.3	78.7
Household savings ratio		-0.9	-0.4	0.6	4.8	2.1	1.6
Household debt ratio <sup>1</sup>		128.9	127.4	127.6	127.9	128.1	128.4

<sup>1</sup> 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. Growth in public consumption expenditure in 2019 was at long-term average. The growth in the price of public consumption was boosted by public-sector pay rises and the expiry of the holiday bonus cut, most of which had already been entered in the books on an accrual basis for 2019.

Public consumption expenditure will grow at a substantially faster rate this year. The growing need for services arising from the ageing of the Finnish population and the frontloaded implementation of spending increases planned by Prime Minister Marin's Government will boost the growth in public consumption expenditure. In 2020, consumption will also be boosted by the public-sector inputs arising from the covid-19 pandemic, lower payment and sales revenue, and the stimulus measures planned by the Government.

The value of public consumption expenditure will continue throughout the forecast period, but at a slower rate than this year. Waning of the covid-19 pandemic and the end of the stimulus measures will reduce the volume of public consumption expenditure in 2021. However, the pay rises agreed for the public sector, most of which will take effect next year, will boost the price of consumption.



## CONFIDENCE OF THE ECONOMIC AGENTS AFTER THE EASING OF THE RESTRICTIONS

The assumption in the June forecast of the Ministry of Finance is that the infections caused by covid-19 virus will gradually disappear by the autumn of this year. However, the possibility of another wave or several new waves of coronavirus pandemic cannot be ruled out. As a result, those making spending decisions are faced with a highly uncertain situation.

The restrictions introduced to prevent the spread of the pandemic have closed down parts of the economy, which will have direct impacts on the economy. Furthermore, those making spending decisions have become less optimistic about the future. There was a substantial fall in consumer confidence in March and April. The confidence indicator rose slightly in May, but the figure is still lower year-on-year and remains below the long-term average.

Uncertainty about the economic outlook is making companies less willing to invest, which is reflected in higher return requirements. Return expectations can be measured with risk premiums, and the assumption is that they will rise during economic crises. Rise in risk premiums will have long-term impacts on economic growth. Concern about lower liquidity is also boosting risk premiums but central banks have attempted to slow down this trend by increasing the amount of capital in the market.

Using the macroeconomic model (KOOA), the Ministry of Finance Economics Department has examined the impacts of lower confidence and rising uncertainty on economic recovery after the restrictions have been lifted. In its calculations, the Economics Department examines the macroeconomic impacts of domestic uncertainty and confidence factors, and thus the calculations only partially explain the economic contraction in Finland during the covid-19 pandemic. The other macroeconomic effects described in this survey have resulted from the contraction of the global economy and direct restrictions. The review period covers the years 2020 and 2021. The results are given as percentage points of the baseline.

The views of households on the economic situation are examined with questionnaire surveys. The purpose of these confidence indicators is to determine how economic actors assess the current situation and to gauge their expectations. If forward-looking households become less optimistic, this will also impact consumption decisions made now. There is no variable in the model that would directly describe the level of optimism among those making spending decisions. However, changes in it can be described using consumers' preference shock. The preference shock experienced by consumers changes the way in which they perceive the benefits arising from consumption in relation to leisure time.

It is assumed in the calculation that consumer confidence will weaken during the second quarter of 2020. This will be in the form of a shock of two percentage points, the size and

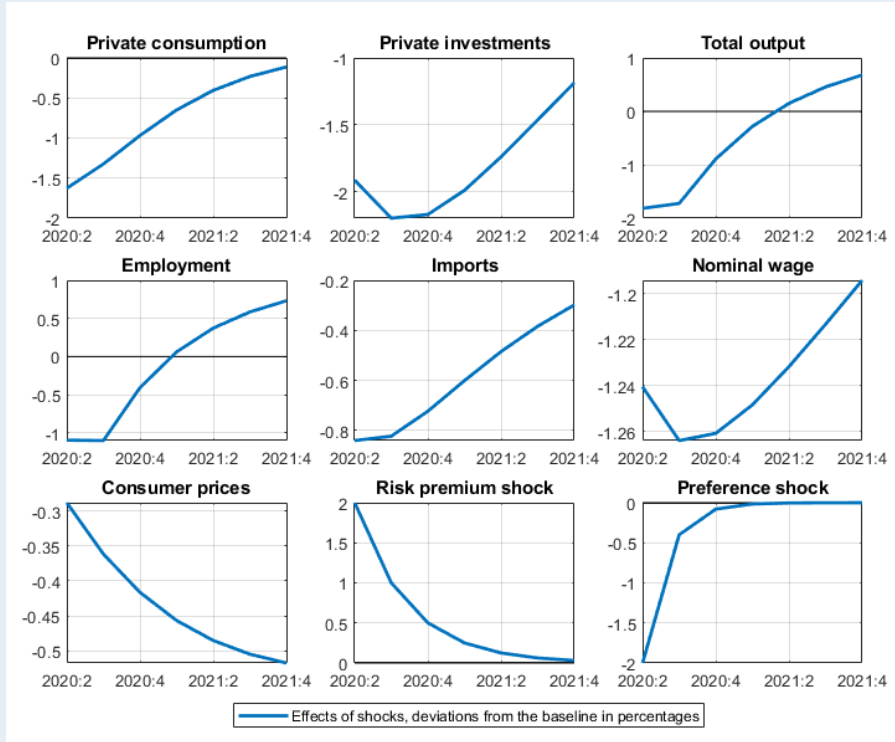
persistence of which has been estimated using the SVAR model. (See Snellman (2020) and of the models, Snellman (2019), and Déés & Güntner (2014).) The shock will weaken so that its impact will no longer be felt during the first quarter of 2021.

A higher degree of uncertainty is modelled using a rise in risk premiums. The assumption in the calculation is that the risk premium will first increase by two percentage points and then fall so that its impacts will no longer be felt at the end of 2021. According to the spring forecast of the European Commission (European Commission, 2020), risk premiums increased by between two and four percentage points during the financial crisis, and the persistence was in accordance with the observations made in the literature. In technical terms, an increase in risk premiums lowers the number of foreign bonds, boosts the demand for domestic bonds and increases domestic interest rates. Rise in interest rates will reduce investments by more than 2 % and domestic demand by more than 1.5 %.

As a result of lower consumption and investments, output will also fall nearly two per cent in the second quarter of 2020. Both GDP and imports will decrease. Slowdown in GDP growth will also reduce the employment rate and slow down the rate of growth in earnings. Together, they will also reduce household purchasing power and reduce consumption after the first quarter. Low demand and wages will also manifest themselves in lower price levels. The shocks will have an extremely long-term negative impact on investments.

However, output and, as a result, employment will recover more rapidly than consumption because in the absence of global economic shocks, exports will compensate for the lack of domestic demand. Domestic uncertainties can only partially explain the economic contraction predicted in the summer forecast of the Ministry of Finance, and a fall in world trade and direct restrictions also have negative macroeconomic impacts. Thus, the recovery of the global economy is essential for the recovery of the Finnish economy in the aftermath of the covid-19 pandemic.

Figure 1: Effects of a decrease in confidence and an increase in uncertainty



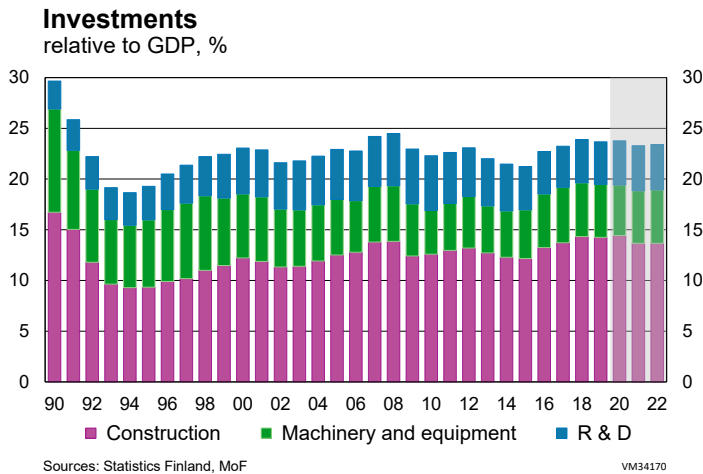
**Sources:**

Snellman, 2020, "Confidence shock", Ministry of Finance memorandum.  
 Snellman, 2019, "Evaluation of DSGE model KOOMA with a sign restricted Structural VAR model", Publications of the Ministry of Finance 2019:62.  
 Déés and Güntner, 2014. "The international dimension of confidence shocks", Working Paper Series 1669, European Central Bank.

### 1.3.3 Private investment

#### The investment environment is still characterised by uncertainty

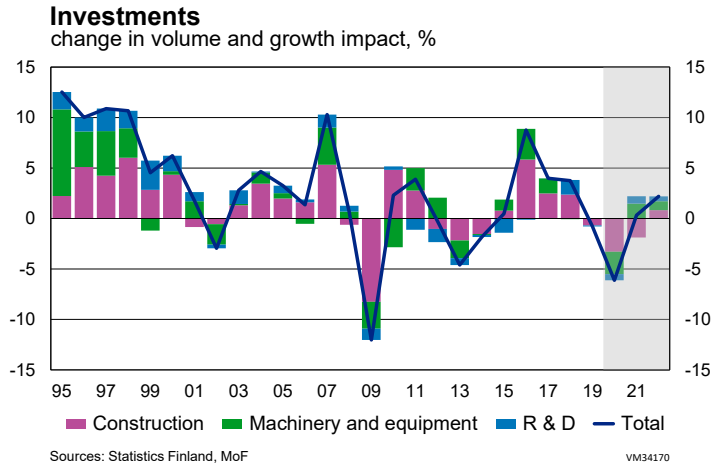
The uncertain outlook in the Finnish investment environment may prompt companies to postpone investments or cancel them altogether. The current state of the global economy and the stagnation affecting Finland's export markets will make companies less willing to launch investments this year. Moreover, there is still a risk that because of the covid-19 pandemic, the supply of capital goods may be disrupted as a result of interruptions in production chains. However, there have been positive signs in the construction sector during the first half of the year compared with the earlier forecasts.



According to the latest data, private investments decreased by 2.5% in the first quarter year-on-year. Growth was only recorded in civil engineering construction. Private investments are expected to contract by more than nine per cent in 2020. Growth will be weakest during the second quarter but will remain sluggish for the rest of the year. Growth in private investments will remain weak in the coming years. On average, private investments will grow by -2% during the forecast period, which means that their ratio to GDP will remain at 19% at the end of the period.

There will be a decrease in housing starts in 2020 and 2021. Even though the number of housing starts was substantially above average in 2019, the figure was well below the totals for 2017 and 2018. Housing starts totalled more than 39,000. Housing construction will fall by 4.6% this year even though the first months of the year were better than forecast and housing starts were on the increase. Construction

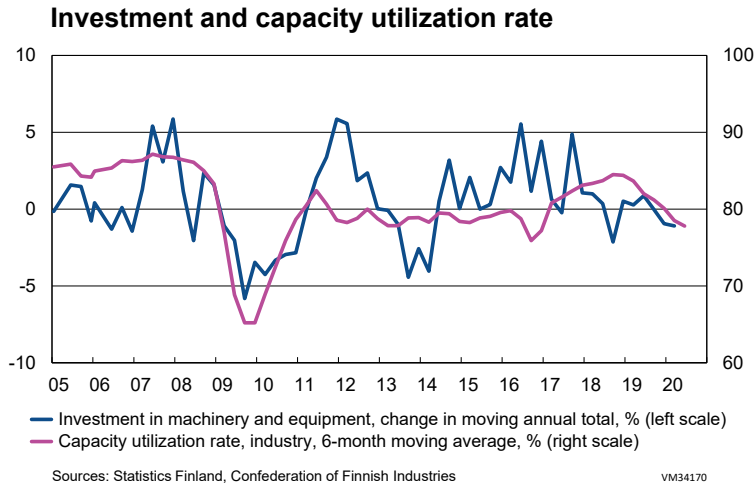
starts are expected to be postponed and housing starts will probably be reduced by several thousand until 2021, which will also reduce housing construction in 2021. After that, housing starts will gradually approach the long-term average (nearly 32,000 starts each year).



There will also be a decline in non-residential building construction investments in 2020 and 2021. However, the last months of 2019 was a busy period in premises construction as starts of public service buildings in particular were at high levels. In industrial construction investments, an uncertain investment environment is causing companies to postpone construction projects. Boosted by infrastructure investments, civil engineering construction will grow during the forecast period.

In an uncertain situation, there will be a substantial decline in investments in machinery and transport equipment in 2020 but they will pick up in 2021. Stronger demand both domestically and internationally towards the end of the forecast period will boost investments in machinery and equipment. Moreover, speedy progress in one major industrial project seems likely. Research and development expenditure will fall at the start of the forecast period, but after that it will increase throughout the period. Government R&D funding will increase in 2020 and 2021.

A number of large projects have reached the planning stage in Finland, especially in the forest industry but some of the projects have been postponed. The assumption in the forecast is that progress in one of the projects will already be reflected in the investments in 2021. However, in general, the long duration of permit processes in Finland slows down major investment projects.



Even though the investment environment remains uncertain, investments in the forecast period are, in addition to major projects, also supported by European initiatives to boost investments and the public investments during the early part of the forecast period. The measures launched by the European Central Bank, the European Commission and the European Investment Bank are expected to speed up investments throughout Europe.

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

	2019	2017	2018	2019	2020**	2021**	2022**
	share, %	change in volume, %					
Buildings	51.0	5.8	4.8	-1.4	-6.8	-4.1	1.8
Residential buildings	30.0	5.3	4.2	-2.8	-4.6	-5.5	2.0
Non-residential buildings	20.9	6.6	5.7	0.5	-10.0	-2.0	1.5
Civil engineering construction	9.2	-3.1	-0.0	0.5	1.9	2.0	-0.5
Machinery and equipment	22.1	6.4	-0.3	0.2	-10.0	7.0	4.0
R&D-investments <sup>1</sup>	17.7	0.1	8.3	-0.5	-3.5	4.0	2.5
<b>Total</b>	<b>100.0</b>	<b>4.0</b>	<b>3.7</b>	<b>-0.8</b>	<b>-6.1</b>	<b>0.3</b>	<b>2.2</b>
Private	82.3	4.8	3.5	-1.0	-9.2	0.3	3.4
Public	17.7	0.2	5.0	0.3	8.0	0.3	-2.7
		%					
Investment to GDP ratio (at current prices)							
Fixed investment		23.2	23.9	23.7	23.8	23.3	23.4
Private		19.2	19.7	19.5	18.9	18.5	18.9
Public		4.1	4.2	4.2	4.8	4.7	4.6

<sup>1</sup>Includes cultivated assets and intellectual property products

### 1.3.4 Public investment

Public investments account for almost 20% of all investments. Local government investments account for more than half of the total, while central government investments account for the rest. The proportion of social security funds is very small. Almost 30% of all public investments are civil engineering investments, and other building investments account for a same proportion of the total. Research and development investments account for slightly more than 25% and machinery and equipment investments for slightly over 10% of the total.

Public investments will grow substantially this year, compared with 2019, as a result of the stimulus measures and other additional investments launched by the Government of Prime Minister Marin. In particular, substantial inputs in traffic infrastructure projects as well as research, development and innovation will boost central government investments. Local government investments will also grow in 2020, though at a slower rate than central government investments. The growth arises from health and social services construction and investments in local government infrastructure. Public sector investments will also be at a high level in 2021 after which they will be gradually reduced.

Public investments are now at a high level in relation to GDP. At the start of 2000s, public investments-to-GDP ratio stood at 3.5%. At the start of the financial crisis, the figure rose to about four per cent and this year, the ratio is estimated at about five per cent.

## 1.4 Domestic production

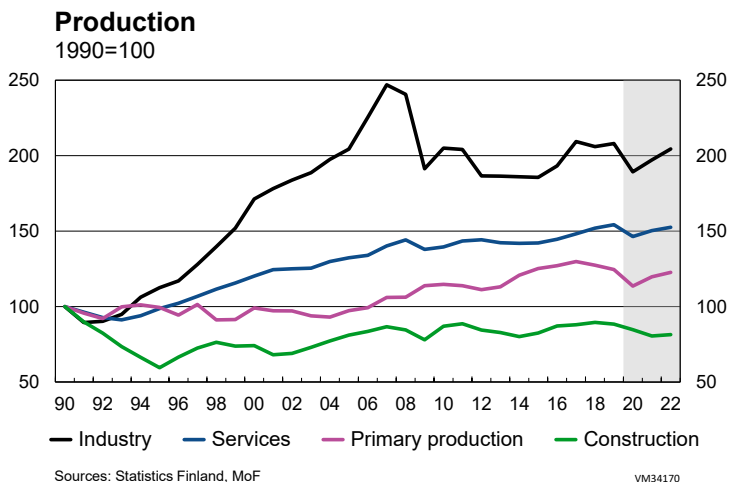
### 1.4.1 Total output

#### **The Finnish economy will contract sharply this year and the road to recovery will be long**

In the first quarter of 2020, output fell by 0.9% quarter-to-quarter and 1.1% year-on-year. Largest falls were recorded in the forest industry and in services that were closed down completely by the restrictions introduced to contain the pandemic. Primary production also decreased, whereas in construction, output was close to the level of the previous quarter.

The sharpest fall in output is expected during the second quarter, a result of domestic restrictions and the substantial decline in export demand. The growth estimates for the second quarter of this year are presented in the box on page 23. The examinations of the models and short-term data support the assumption that the second quarter would be the weakest period of the year.

An upturn is expected during the third quarter and the growth should continue until the end of the forecast period in 2022. Compared with the financial crisis, the contraction of the service sector has been unprecedented, and this development can be attributed to the impacts of the covid-19 pandemic. The Finnish GDP is expected to contract by 6% in 2020.

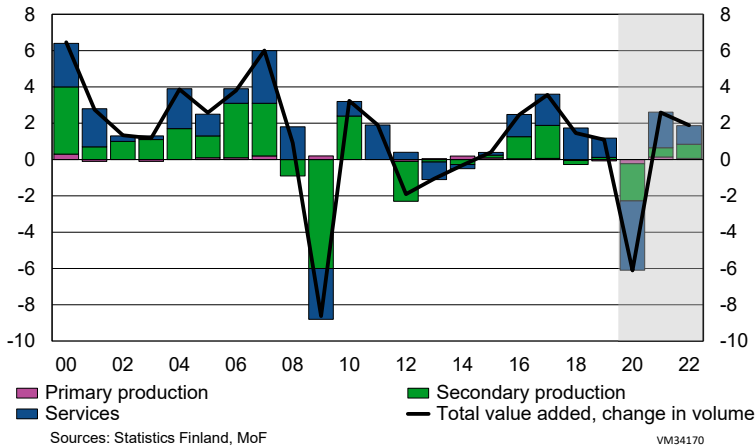


The year 2021 can be characterised as the year of recovery. The Finnish gross domestic product is expected to grow by 2.5% next year. Boosted by acceleration of global trade, the growth will significantly exceed potential output growth. Other main sectors will grow but construction will contract as high production volumes will be adapted to long-term demand.

In 2020, economic growth will slow down to 1.7%, mainly because of a slowdown in service sector growth. Global trade will also be of less help in 2022.

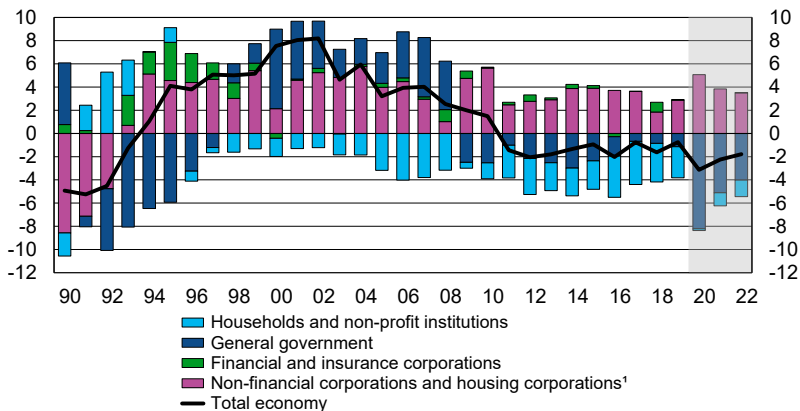


### Contribution to total production percentage points



Economic productivity per hours worked will decrease by 1.2% this year because the value of production will decline significantly more than the hours worked. When calculated per employed persons, productivity will contract by more than 3.5%. In 2021 and 2022, economic productivity will increase at an annual rate of about 1.5%. The operating surplus is expected to shrink this year by double-digit figures, but reasonable growth is expected next year. Measured with unit labour costs, Finland's price competitiveness will fall by 2.5% in 2020. However, the downward trend will slow down in 2021 and 2022 as productivity will pick up again.

### Net lending by sector relative to GDP, %



1) Including financial sector in 2020-2022

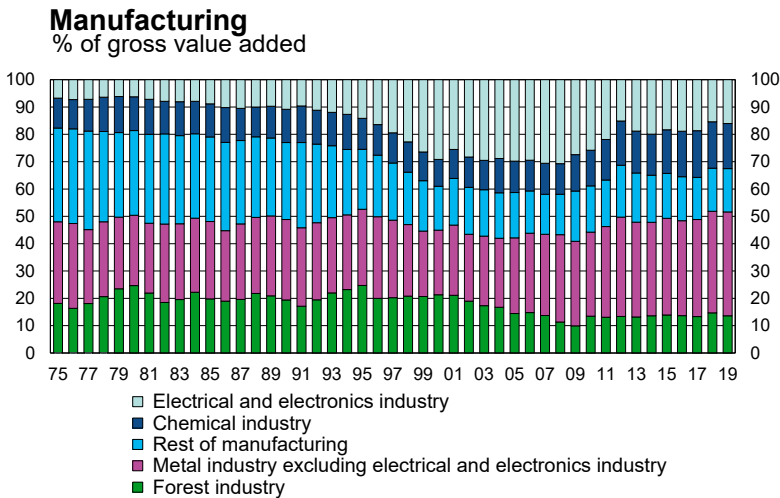
Sources: Statistics Finland, MoF

## 1.4.2 Secondary production

### Manufacturing sector is affected by paralysis of world trade

Finland’s manufacturing sector remained largely unaffected by the pandemic during the first quarter as there was only a slight fall in output. This year will be overshadowed by sluggish growth of the world economy and as exports are also affected, substantial fall in output can be expected in Finland. World trade already contracted by 2.8% during the first months of the year but Finland’s manufacturing output decreased only slightly.

According to business tendency surveys, nearly all manufacturing sectors are highly pessimistic about the future outlook. New orders decreased by more than 9% in March.



Source: Statistics Finland

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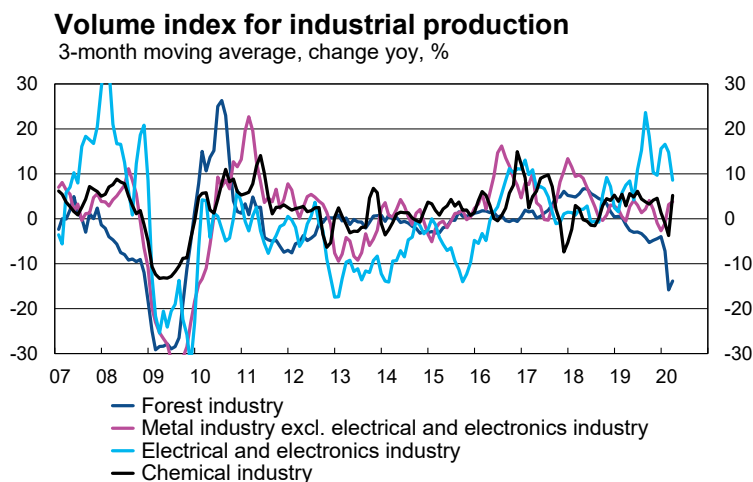
Industrial production is expected to fall by more than 9% in 2020. Next year, growth in industrial production is expected to be above average as world trade is predicted to grow at a rapid rate.

The first months of 2020 were particularly difficult for the forest industry, mainly because of the strikes in the sector. In fact, only a slight contraction is expected for the second quarter because the outlook for the chemical forest industry is relatively bright. The pandemic will probably boost the demand for tissue papers and

paperboard used as packaging material. Paper production will decrease in Finland: one paper machine was closed down at the end of last year, and two additional machines will probably be closed before the end of this year. The demand outlook for the wood industry remains bleak. This is because construction has decreased in the euro area and in many other export markets for sawn timber, at least temporarily.

Sluggish demand for air transport and consequently for petroleum products during the current year is weakening the demand for chemical industry products. According to business tendency surveys, chemical industry companies expect their output to fall substantially in the coming months.

There was a sharp fall in metal industry orders in March. The decrease was 14% year-on-year. The demand for metal industry products is expected to decline because construction using its products as intermediate products is expected to decrease this year both in Finland and elsewhere in Europe. The recovery of the metal industry may be slower than expected if the investment recession becomes a reality.



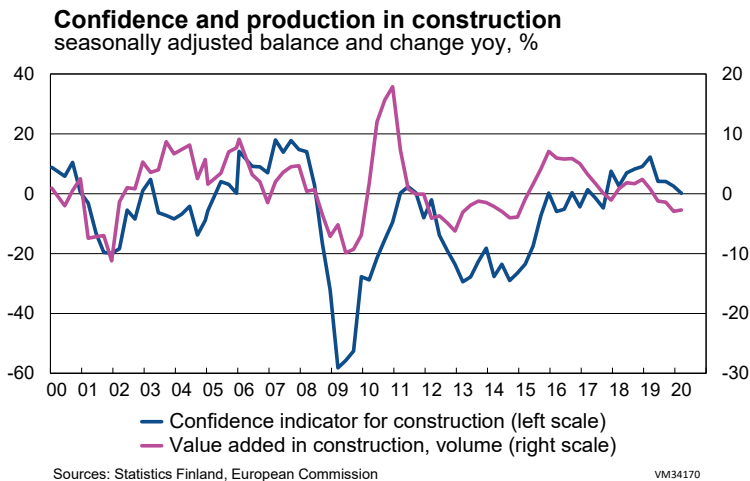
Source: Statistics Finland

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According to business tendency surveys, output in the technology industry is also expected to fall substantially in the coming months. The number of employees has been reduced and insufficient demand is the main obstacle to production.

### Construction will decrease but less than anticipated in the previous forecasts

During the first few months of the year, the construction sector has performed better than previously forecast. In fact, there were more housing starts during the first quarter year-on-year as the demand among investors has remained brisk. Interest rates have remained low, and as a result, investors may also remain interested in the Finnish property market in the future. This is in sharp contrast to previous crises.



The construction sector was doing well in Finland at the outbreak of the covid-19 pandemic even though construction already contracted in 2019. There was still a shortage of skilled workforce at the start of 2020 and work had started at a large number of sites. So far, such risk factors as the supply of workforce and materials and interruption of construction projects have not had any significant impact on the pace of work. A number of project starts have been postponed. However, construction volumes are gradually decreasing in line with the substantial fall in the number of building permits. According to the latest business tendency surveys, there is not much optimism among construction companies. In the figure attached, the change is not yet visible.

The estimate for construction output is now more optimistic than in the previous forecast. Finland's construction output is expected to shrink by 4.5% this year. At the same time, however, the forecast for 2021 has been lowered and the forecast for the year as a whole is slightly more pessimistic than the projection for this year.

Housing starts are expected to total about 30,000 this year. The total is expected to decrease by a few thousand next year and the number of housing starts is not expected to approach the figure of 32,000 until the year 2022. Construction levels will be maintained by premises construction this year as a large number of public buildings (schools and hospitals) are still built. There will be fewer starts next year and the economic slowdown may lead to the postponement of planned projects.

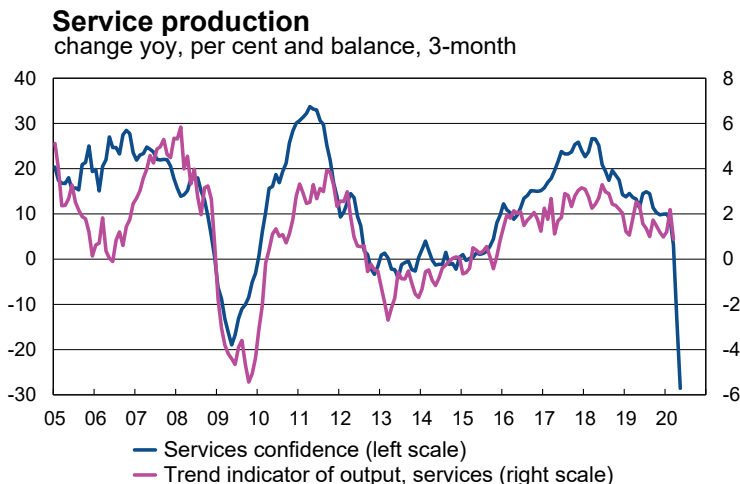
Further growth in renovation construction is expected and most of the renovation projects managed by professionals have progressed as planned. The problems have mainly concerned decision-making in housing company renovation projects as consumers have been reluctant to start new projects during the restrictions. At the same time, self-renovation is on the increase.

Civil engineering construction is growing briskly this year. As outlined in the Government Programme, more permanent funding has been allocated for basic transport infrastructure maintenance from the start of this year, while infrastructure investment projects are also speeded up as stimulus measures.

### 1.4.3 Services

#### The impacts of the crisis on services vary but total service output will fall sharply

Services account for most (nearly 70%) of Finland's total output and even though the decrease in industrial production is larger in percentage terms, contraction of services will have the greatest impact on GDP. Service production is projected to shrink by more than 5% this year even though public service production will increase. Transport (-3%) and other services (-10%) contracted during the first quarter. Other services include personal services (hairdressers, libraries and arts services). Accommodation and catering are particularly hard hit by the lack of demand, and in fact, the bleakest forecasts concern these two sectors.



Sources: Statistics Finland, European Commission

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Most of the service sectors are expected to grow briskly next year even though in some areas (such as tourism), the demand may remain at pre-crisis levels for many years. Services are expected to grow by nearly three per cent next year.

The economic outlook of trade collapsed during the early months of the year. Sales volumes fell and companies expect further contraction in the coming months. The number of employees has been reduced during the past few months and substantial cuts are also expected in the next few months. However, the latest preliminary turnover figures for retail trade have been relatively good and even though there has been a sharp fall in the sales of new cars, a large number of used cars have been sold. Demand for products sold online and the transport services

related to them has also increased. In most sectors, the impacts of the pandemic have been negative but some businesses (such as online commerce) have increased their turnover during the emergency.

A decrease in industrial output is also causing service production to fall. Service exports are shrinking as international demand decreases. If remote connections and the digital economy can be adequately used in service exports, the impacts may be of shorter duration.

**Table 10. Production by industry**

	2019	2017	2018	2019	2020**	2021**	2022**
	share, % <sup>1</sup>	change in volume, %					
Industry	20.1	8.4	-1.6	1.0	-9.1	4.3	3.6
Construction	7.6	1.0	1.7	-1.2	-4.5	-4.8	1.2
Agriculture and forestry	2.6	2.1	-1.9	-2.9	-9.2	5.5	2.4
Industry and construction	27.7	6.5	-0.8	0.4	-7.6	1.9	2.9
Services	69.7	2.5	2.5	1.5	-5.4	2.8	1.5
<b>Total production at basic prices</b>	<b>100.0</b>	<b>3.6</b>	<b>1.5</b>	<b>1.1</b>	<b>-6.1</b>	<b>2.6</b>	<b>1.9</b>
GDP at market prices		3.1	1.6	0.9	-6.0	2.5	1.7
Labour productivity in the whole economy		2.9	-0.8	0.3	-1.2	1.3	1.5

1) Share of total value added at current prices.

## POTENTIAL OUTPUT AFTER CORONAVIRUS

The covid-19 epidemic and the policy measures introduced to contain it are causing a rapid and sharp contraction of economic activity in Finland and globally. We do not know yet how long this recession will last. Business cycles are often considered to be fluctuations of activity around potential economic growth: a downturn is followed by a period of rapid growth as the economy returns to its growth path. This is not necessarily the case (for example, Ball, 2014; Cerra et al., 2020). In fact, the non-existent Finnish recovery after the financial crisis reminds us of the long-term impacts that shocks can have. Sometimes, the scars of epidemics have been visible for decades (Jordà et al., 2020).

### Employment

Mortality rises during epidemics but covid-19 is fatal mainly to the elderly and seriously ill. It seems that, unlike in previous epidemics, there has not been any substantial decrease in labour force. Thus, the capital-to-labour ratio does not increase and as a result, a decrease in the level of investments will not follow, as was the case in the 1918 influenza (Fan et al., 2016).

The second route may arise from prolonged unemployment. Preventing the epidemic and the measures taken to contain it will reduce the labour utilization, at least temporarily. In Finland (and in many other European countries), reducing workforce is largely managed through temporary layoffs (or other similar arrangements) but in countries like the United States, it has led to a sharp increase in unemployment. In the past, unemployment served as a symbol reminding people of the permanent traces left by a recession (Cerra et al., 2020). Prolonged unemployment will weaken an individual's future opportunities for work and pay rises. Also, employment and pay opportunities of the cohort entering the labour market during a recession are weaker than those of other groups (Cerra et al., 2020). Unemployment may also have other negative long-term impacts on individuals and families. Young employees are more strongly affected by the long-term impacts than others, and the impacts become more serious as the unemployment periods become longer (for example, Arulampalam et al., 2001; Tumino, 2015). Participation rates also fall during a recession (Ball, 2014).

The second employment route involves the erosion of human capital. Employees accumulate specialised expertise at workplaces and in specific tasks that is not of equal value when used elsewhere. Employees that have lost their jobs are not immediately equally productive in alternative tasks. Likewise, even if a company survives a recession, employee turnover may have weakened its productivity. Moreover, in unemployment, human capital is eroded, skills decline and individuals may no longer be as well integrated in the labour market as before. Human capital is critical to future growth (Delong et al., 2002).



## Capital

Lower capital stock provides the second channel for permanent impacts. When investments are substantially reduced during an epidemic, this will directly lead to lower potential growth in the future.

Uncertainty about the future is essential for investments (Bloom, 2009). The covid-19 epidemic has increased both short-term and long-term uncertainty. Uncertainty may have increased more than during the financial crisis (Baker et al., 2020). This will lead to substantially lower investments, especially to R&D and other intangible investments, which are particularly sensitive to uncertainties (Barrero et al., 2017).

The capital impact can be strengthened by the disruption of global value chains and the difficult process of re-establishing them. Acemoglu et al (2012, 2020) have shown that when a company-specific shock spreads in the value chain, its indirect impacts may be more substantial than the impulse and its direct multiplier effects. Some of the benefits of globalisation have arisen from these indirect impacts. As a result of the covid-19 epidemic, the indirect impacts of the reorganised value chains may act in a similar but negative manner.

Preventing the epidemic and the measures taken to contain it may cause temporary liquidity problems that will lead to bankruptcies when lasting long enough. A recession may also change demand and other structures so that previously profitable business operations will become loss-making. In bankruptcies, tangible and intangible capital is destroyed, and trust and tacit company-specific knowledge and skills disappear. Moreover, a company has accumulated organisational capital during its existence that is valuable in that particular company. It is estimated that organisational capital accounts for an average of 3% of the value of a company's turnover (Lev and Radhakrishnan, 2003). The new company built using the pieces left behind by a bankruptcy is not as good as the original company would have been when not affected by a recession.

## Productivity

The third potential channel for long-term impacts arises from productivity that has been weakened by a recession. Lower R&D and other intangible investments will leave less room for productivity growth in the future.

The crisis treats different sectors and different companies asymmetrically. Profitable companies with strong balance sheets and companies whose purchasing, production and distribution practices are not much affected by the virus and the measures to contain are best placed to cope with the recession. Young companies, companies with weak balance sheets (such as small companies specialized in immaterials) and companies that are strongly affected by the virus or the measures taken to contain it are worst-placed to cope with the recession. It seems that the most productive, dynamic and innovative companies do not cope with the crisis any better than other companies (Arrighetti et al., 2015). Young growth-oriented companies are in a key position in

terms of productivity trends. They also create most of the new jobs (Adelino et al., 2017; Haltiwanger et al., 2013).

Not all companies are hit by the pandemic in the same manner. In fact, some companies may even benefit from it (such as those supplying health care equipment and pharmaceuticals and online businesses). It may be that after the epidemic, we need a new allocation of products and services, which in companies would imply a different way of allocating capital and employment. Poor allocation serves as a bottleneck for productivity growth (Hopenhayn, 2014; Restuccia and Rogerson, 2017). New products of young companies and expansion of small companies play a crucial role in the reallocation. These are extremely important as productivity drivers (Argente et al., 2017). Such renewal does not usually take place during recessions, which further weakens productivity growth.

### **Demand**

Epidemics may also cause a long-term reduction in demand, which in turn will lead to fewer investments. Jordà et al. (2020) observed that previous epidemics increased prudential saving among consumers, discouraged investments and lowered equilibrium interest rates. A recession also treats different employees asymmetrically. Unemployment hits high-consumption employees particularly hard, which further strengthens the demand impact of the recession. There are often more high-consumption employees in small and young companies (Patterson, 2019).

### **Conclusion**

It has been argued above that the risks inherent in a recession caused by an epidemic might cause the potential output to remain below the pre-crisis path for a long time. It is also possible that the crisis has forced companies and organisations to introduce new technologies and to use it in a more productive manner, which may run counter to the channels of influence discussed above. Fernald (2014) also argues that the financial crisis did not lower productivity or potential output in the United States, as they had already slowed down before the crisis. The same might also apply to the recession triggered by the covid-19 epidemic in Finland.

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## 1.5 Labour force

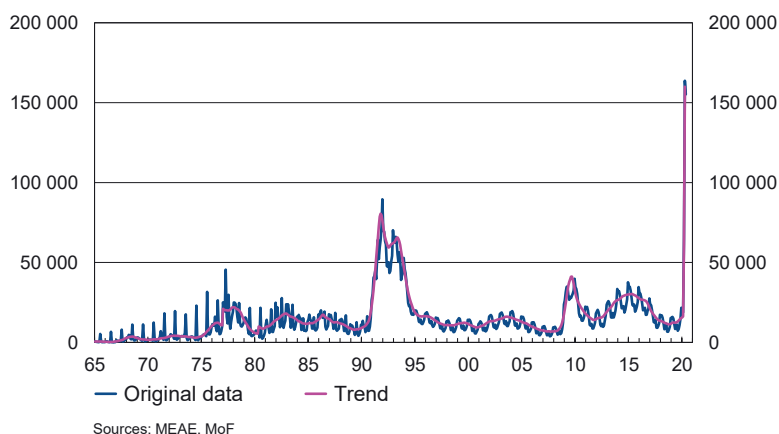
### **Unemployment will rise substantially**

The employment situation has rapidly gone from good to worse. Last year, the number of employed persons increased by one per cent but during the early months of this year, employment decreased by 0.1%. Employment decreased in primary production, construction, retail trade, transport, accommodation and catering services. Supply of labour (number of employed persons) continued to increase in industries and in many business service sectors. The number of hours worked decreased more than the number of employed persons (by 1.4%). The number of hours worked also contracted in services and industries (unlike the number of employed persons).

At the moment, there is no demand for labour force in the labour market because the number of persons outside the labour force has increased during the early months of the year. Last year, their numbers decreased. Demand for labour has been on the decrease since the early months of the year. The number of job vacancies was substantially lower in spring than at the end of last year. In fact, the employment expectations of Finnish companies collapsed in April (especially in services). The expectations were slightly higher in May.

Companies have adjusted their labour costs by laying off staff and making employees redundant. There has been a record increase in layoffs this spring. Employees laid off on a full-time basis totalled more than 160,000 at the end of April, which is almost twice as many as during the previous peak (in 1991). There are also tens of thousands of employees that have been laid off on a part-time basis. The number of employees laid off on a full-time basis totalled more than 155,000 at the end of May. There will be hundreds of thousands of people registered as jobseekers for many months to come because the number of persons registered as unemployed for other reasons by the Ministry of Economic Affairs and Employment totalled 275,000 at the end of May. At the same time, the total number of unemployed jobseekers stood at 431,000.

### Number of full-time layoffs persons at the end of the month



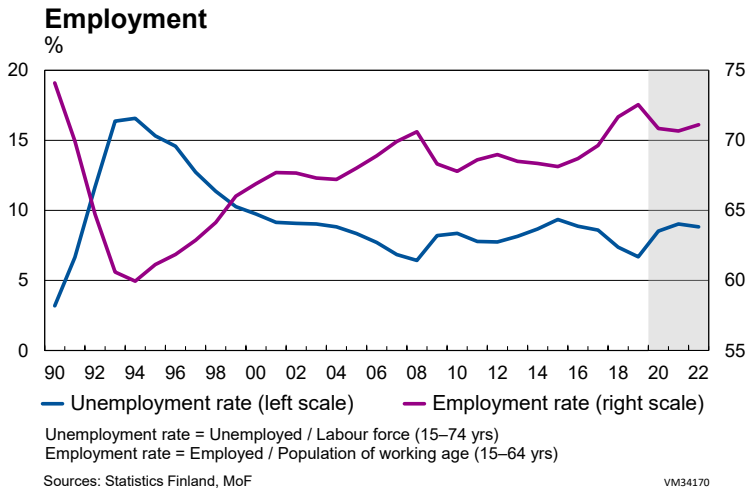
The number of employed persons will fall more sharply this year as the measures to contain the covid-19 pandemic and slow recovery are causing total output to fall. If the economic recovery will continue as expected during the latter half of the year, the fall in employment will slow down considerably towards the end of the year. In that case, employment will decrease by an average of 2.5% this year and the employment rate will fall below 71%.

If the crisis is largely over by the end of this year, predicted economic recovery will gradually improve demand for labour in 2021 and 2022. In that situation, the

**Table 11. Labour market**

	2017	2018	2019	2020**	2021**	2022**
	annual average, 1,000 persons					
Population of working age (15–74 yrs)	4114	4124	4128	4131	4123	4111
change	5	10	4	3	-8	-12
Population of working age (15–64 yrs)	3451	3439	3428	3423	3416	3410
change	-12	-12	-11	-5	-7	-6
Employed (15–74 yrs)	2474	2538	2567	2502	2490	2502
of which 15–64 yrs	2403	2465	2487	2425	2414	2425
Unemployed (15–74 yrs)	233	202	184	233	248	242
	%					
Employment rate (15–64 yrs)	69.6	71.7	72.5	70.8	70.7	71.1
Unemployment rate (15–74 yrs)	8.6	7.4	6.7	8.5	9.1	8.8
	1,000 persons per annum					
Immigration, net	17	16	18	15	15	15

number of employed persons would no longer contract within 2021 and would start increasing in 2022. The number of employed persons would nevertheless remain substantially below 2019 levels and the employment rate would stand at 71% in 2022.



The internationally comparable unemployment rate (based on the data compiled by Statistics Finland) has not yet increased unlike the number of unemployed jobseekers entered in the statistics of the Ministry of Economic Affairs and Employment. However, there has been a sharp increase in the number of hidden unemployed outside the labour force but interested in work and the number of underemployed individuals willing to work longer hours.

Thus, a substantial increase in unemployment can be expected. Driven by a fall in employment and because of a large number of layoffs, the number of unemployed will increase by about a quarter in 2020 and the unemployment rate will reach 8.5%. Even if the recovery from the covid-19 pandemic continued and the economic downturn did not lead to a wave of bankruptcies and mass redundancies, unemployment would still increase next year. In the modest economic recovery scenario, unemployment would reach 9% next year and, driven by economic growth, it would not fall before 2022.

Under the positive scenario, unemployment might also remain lower than forecast. Fixed-term layoffs will come to an end unless new decisions on them are made. Layoffs in effect until further notice can be terminated and in that case, employment might recover quite rapidly if the demand for labour picked up on a broad front.

## 1.6 Incomes, costs and prices

### 1.6.1 Wages and salaries

#### **Earnings will rise but the wage bill will be affected by higher unemployment**

Rate of nominal wage increases slowed down from 2.2% last year to 1.8% in the early months of the year. The slowdown was due to lower negotiated increases because wage drifts increased. Private-sector earnings rose by 1.6%, which means that the increases in public-sector earnings were above average.

A large number of new collective agreements have been concluded in the private and public sector in the first months of the year. The agreements concluded so far cover more than one million wage-earners. Under the agreements, nominal wages will rise

by an average of less than 1.5%. Wage drifts are usually smaller during an economic downturn. If this will also be the case this year, nominal earnings will increase by slightly more than 1.5%.

Higher level of economic activity and the resulting rise in demand for labour will probably lead to higher wage drifts in 2021 and 2022. Moreover, the private and public sector wage rises agreed for 2021 during the early months of this year are about 0.5 percentage points higher. Thus, the negotiated increases and nominal increases would amount to 2.5% next year. Some of the collective agreements concluded this spring will remain in effect until early 2023. The wage rises for the employees covered by these agreements will be set at a later date but the assumption in the forecast is that the negotiated increases will not be higher than in 2021. Thus, nominal wages would rise by 2% in 2022.

In addition to nominal earnings, the wage bill is also affected by employment trends. As the employment will fall sharply this year, the wage bill will also decrease (by nearly three per cent). Driven by rising earnings and higher employment, the wage bill is expected to increase by slightly more than 2.5% in 2021 and 2022.

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

	2017	2018	2019	2020**	2021**	2022**
	change, %					
Index of negotiated wage rates	-0.3	1.2	2.0	1.3	2.0	1.4
Wage drift, etc.	0.5	0.5	0.2	0.3	0.5	0.6
<b>Index of wage and salary earnings</b>	<b>0.2</b>	<b>1.7</b>	<b>2.2</b>	<b>1.6</b>	<b>2.5</b>	<b>2.0</b>
Real earnings <sup>1</sup>	-0.5	0.6	1.1	1.3	1.4	0.6
Average earnings <sup>2</sup>	0.7	2.2	2.3	2.3	1.6	2.2
Labour costs per unit of output whole economy <sup>3</sup>	-2.7	2.4	1.2	2.5	1.4	1.1

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 decreased in April year-on-year. Decrease in energy prices in particular also led to lower consumer prices even though energy taxes were raised at the start of the year. Prices of goods continued to fall and there was also a slowdown in the rise of service prices in April. Food prices especially non-processed food, have risen rapidly during the early months of the year.

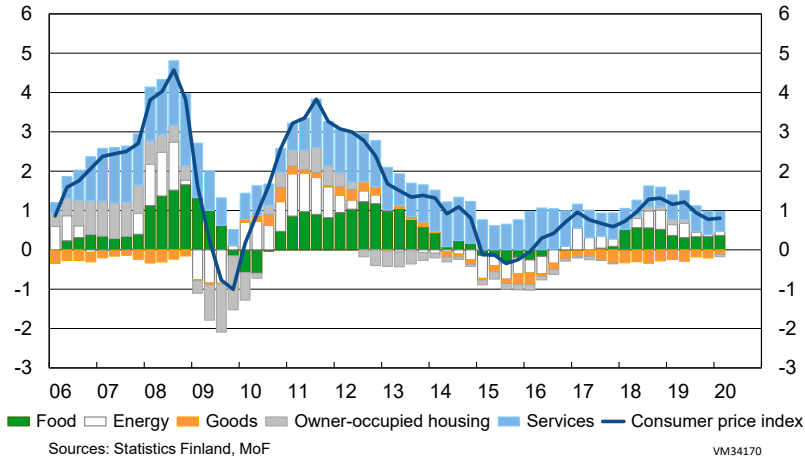
Measured with the national consumer price index, an inflation rate of 0.3% is forecast for 2020. Falling crude oil prices will reduce energy costs and will be directly reflected in lower energy prices. Lower energy prices will also slow down prices of other items. Substantial contraction of consumer demand this year and uncertainties about the future will slow down inflation this year but also in the coming years.

The national consumer price index is expected to rise by 1.1 % in 2021 and by 1.4 % in 2022. Tax increases targeting consumption will boost inflation in both years, particularly in 2021.

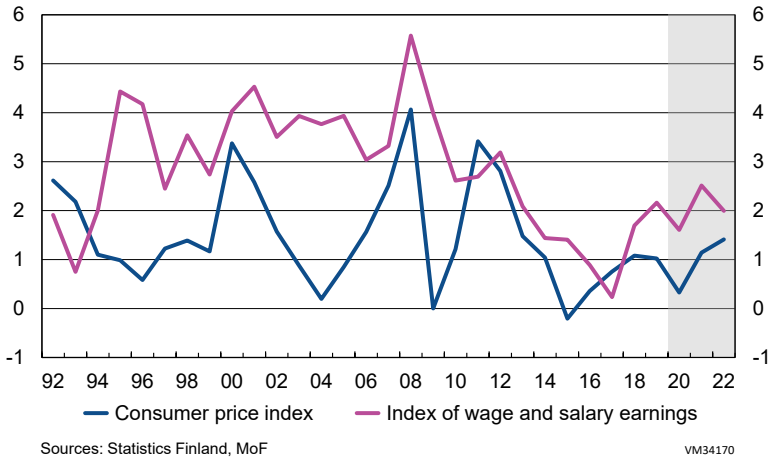


### Consumer price index

percentage change and contribution to change



### Consumer price index and index of wage and salary earnings change yoy, %



**Table 13. Price indices**

	2017	2018	2019	2020**	2021**	2022**
	change, %					
Export prices <sup>1</sup>	3.3	4.2	-0.7	-2.0	1.3	1.7
Import prices <sup>1</sup>	3.8	3.4	0.3	-1.8	1.0	1.7
Consumer price index	0.7	1.1	1.0	0.3	1.1	1.4
Harmonised index of consumer prices	0.8	1.2	1.1	0.4	1.2	1.5
Basic price index for domestic supply, including taxes	4.9	4.7	1.0	-0.9	1.6	2.0
Building cost index	0.3	2.2	1.0	0.8	1.8	2.0

<sup>1</sup> As calculated in the National Accounts

## 2 Public finances

### 2.1 General government finances

Finland's general government finances will post a substantial deficit this year. Sharp contraction of the economy and the measures taken to mitigate the impacts of the covid-19 pandemic will weaken general government finances. General government deficit is expected to be slightly more than EUR 18.5 billion in 2020. General government debt-to-GDP ratio will rise by 12 percentage points, to more than 71%.

Even though the economic disruption is expected to be of short duration and the Finnish economy will grow at a rate of more than two per cent next year, this exceptional downturn will leave deep traces in general government finances. The economic growth expected in the coming years will not be enough to balance the general government budgetary position and Finland's general government finances will remain substantially in the deficit. The substantial deficits accumulated by central and local government will also increase the debt ratio in the coming years.

General government finances are weakened by structural problems. Ageing of the population will automatically increase public spending and weaken the growth potential of the economy, thus slowing down growth in tax revenue. Finland's general government finances have a long-term sustainability problem. Our general government finances are now more poorly placed to face the expenditure pressures arising from the ageing of the population.

Central government deficit will exceed EUR 16.5 billion this year. The economic downturn is reducing tax revenue and increasing unemployment-related expenditure. The fiscal stance is also highly expansionary. By June 2020, the Government has presented a total of four supplementary budgets setting out

support for citizens and companies. Central government deficit will start to decrease next year as the fixed-term support measures are coming to an end and economic growth will gradually boost tax revenue. The fiscal stance and the support measures prompted by the covid-19 pandemic are described in detail in the box on page 69.

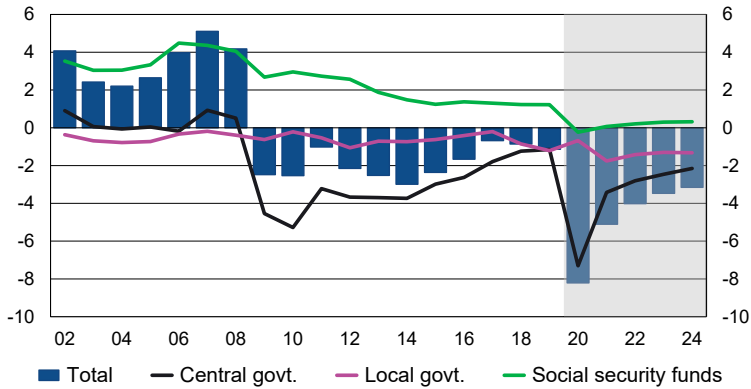
The local government financial situation has been very difficult for a number of years. The economic downturn means higher spending and lower tax revenue but the pandemic has also prompted central government to provide municipalities with substantial financial support this year. The local government budgetary position is also burdened by the growing need for health and social services and expenditure as the population is ageing.

Until now, the employment pension institutions, which are part of the social security funds, have posted substantial surpluses. In 2020, however, the surplus of the employment pension institutions will disappear as the employment pension contributions are temporarily lowered and the weakening of the employment situation will reduce contribution revenue. Moreover, rapid growth in pension expenditure is continuing and low interest rates are slowing down growth in employment pension institutions' property income. Other social security funds will also post deficits as extensive layoffs, higher unemployment and temporary extension of the unemployment security will boost benefit expenditure.

The risks affecting general government finances are closely connected with the overall economic developments. The duration of the downturn and the way in which the economy will recover from it involve a great deal of uncertainty. A rapid and strong economic recovery will also ensure that general government finances will only be moderately affected by the crisis. At the same time, a second wave of the pandemic and the reintroduction of restrictions as a result would slow down the economic recovery and weaken general government finances. Moreover, 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 will also increase this year 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.

### General government financial balance

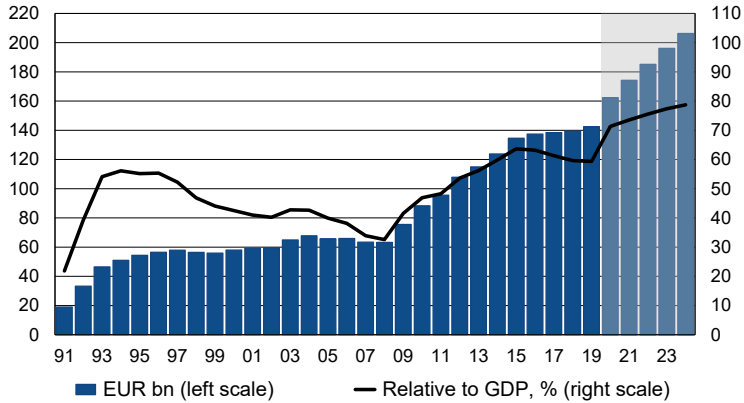
relative to GDP, %



Sources: Statistics Finland, MoF

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### General government debt

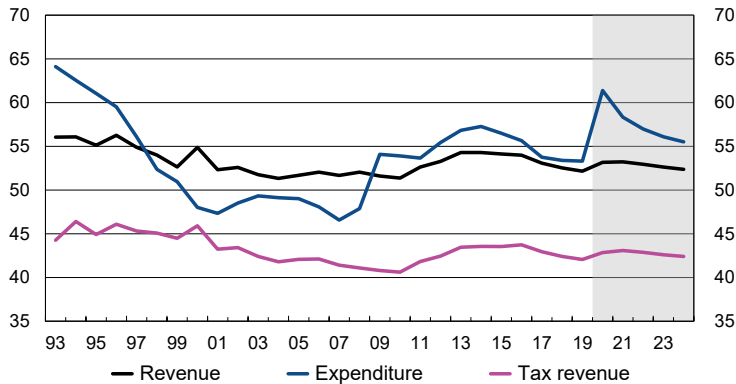


Sources: Statistics Finland, MoF

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### General government revenue, tax revenue and expenditure

relative to GDP, %



Sources: Statistics Finland, MoF

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**Table 14. General government finance<sup>1)</sup>**

	2017	2018	2019	2020**	2021**	2022**
	EUR billion					
Current taxes	37.2	37.4	38.3	37.5	38.4	39.9
Taxes on production and imports	31.6	33.1	33.6	32.6	34.1	34.8
Social security contributions	27.3	27.9	28.3	26.7	28.8	29.6
Taxes and contributions, total <sup>2</sup>	97.0	99.1	101.0	97.6	102.1	105.1
Other revenue <sup>3</sup>	23.8	24.4	25.0	24.3	24.8	25.5
of which interest receipts	1.7	1.8	1.7	1.5	1.6	1.7
<b>Total revenue</b>	<b>119.9</b>	<b>122.7</b>	<b>125.2</b>	<b>121.0</b>	<b>126.1</b>	<b>129.8</b>
Consumption expenditure	51.6	53.4	55.5	59.9	60.0	61.2
Subsidies	2.7	2.7	3.0	5.3	3.4	3.0
Social security benefits and allowances	42.6	43.0	43.7	47.8	47.7	48.5
Other current transfers	5.3	5.6	6.0	6.0	6.0	6.0
Subsidies and current transfers, total	50.6	51.4	52.6	59.1	57.1	57.5
Capital expenditure <sup>4</sup>	9.6	10.2	10.3	11.5	11.7	11.6
Other expenditure	9.7	9.8	9.6	9.2	9.5	9.4
of which interest expenses	2.3	2.1	2.1	1.8	1.7	1.6
<b>Total expenditure</b>	<b>121.4</b>	<b>124.7</b>	<b>128.0</b>	<b>139.7</b>	<b>138.2</b>	<b>139.7</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-1.5</b>	<b>-2.0</b>	<b>-2.7</b>	<b>-18.7</b>	<b>-12.1</b>	<b>-9.9</b>
Central government	-4.0	-2.9	-2.8	-16.6	-8.1	-6.9
Local government	-0.5	-2.0	-2.9	-1.5	-4.2	-3.5
Employment pension schemes	2.2	2.3	2.2	-0.1	0.7	0.9
Other social security funds	0.7	0.6	0.7	-0.4	-0.6	-0.4
Primary balance <sup>5</sup>	-1.0	-1.6	-2.4	-18.4	-12.0	-9.9

1) As calculated in the National Accounts

2) Incl. capital taxes

3) Incl. capital transfers and consumption of fixed capital

4) Gross fixed capital formation and capital transfers

5) Net lending before net interest expenses

**Table 15. Main economic indicators in general government**

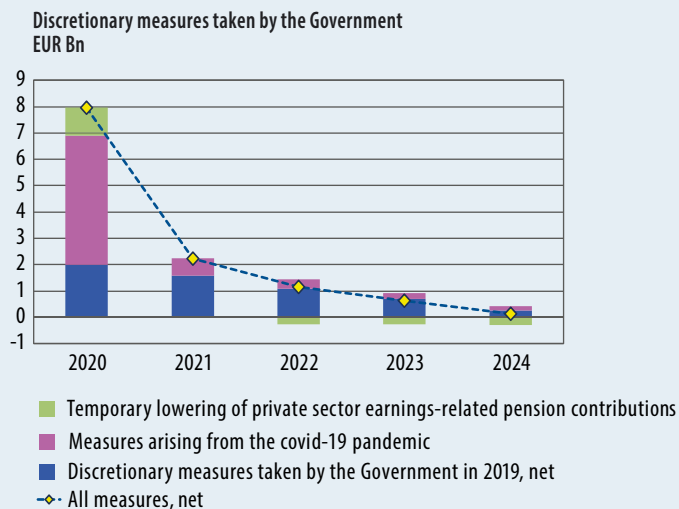
	2017	2018	2019	2020**	2021**	2022**
	relative to GDP, %					
Taxes and social security contributions	42.9	42.4	42.1	42.9	43.1	42.9
General government expenditure <sup>1</sup>	53.8	53.4	53.3	61.4	58.3	57.0
Net lending	-0.7	-0.9	-1.1	-8.2	-5.1	-4.0
Central government	-1.8	-1.2	-1.2	-7.3	-3.4	-2.8
Local government	-0.2	-0.9	-1.2	-0.7	-1.8	-1.4
Employment pension institutions	1.0	1.0	0.9	-0.0	0.3	0.4
Other social security funds	0.3	0.3	0.3	-0.2	-0.2	-0.2
Primary balance <sup>2</sup>	-0.4	-0.7	-1.0	-8.1	-5.0	-4.0
General government debt	61.3	59.6	59.4	71.3	73.5	75.5
Central government debt	46.8	44.9	44.3	54.8	55.8	56.9
General government employment, 1,000 persons	619	632	633	644	640	638
Central government	132	135	136	136	135	134
Local government	476	484	484	496	492	491
Social security funds	12	13	13	13	13	13

1) EU-harmonized definition

2) Net lending before net interest expenses

## FISCAL STANCE

Fiscal policy stance is highly expansionary in 2020. Because of the spending increases outlined in the Government Programme, the fiscal policy was already slightly expansionary before the outbreak of the covid-19 pandemic. Preparation for the epidemic and the measures introduced to mitigate its harmful impacts will substantially weaken Finland's general government finances. The economic stimulus measures are also boosting general government spending. Next year, fiscal policy stance will be contractionary as many of the temporary support measures will expire.



Source: MoF

By early June, the Government had presented four supplementary budget proposals to Parliament outlining measures to tackle and contain the epidemic and to support citizens and companies. The measures set out in the supplementary budgets will weaken general government net lending recognised in the national accounts by a total of about EUR 6 billion (2.6% of GDP) in 2020.

Companies have been provided with substantial support in the form of direct grants. As part of the stimulus package contained in the fourth supplementary budget proposal submitted to Parliament on 5 June 2020, the Government increased grants for companies by raising Business Finland's grant authorisations and by introducing a general cost support for companies.

The Government has also supported companies' ability to cope with the emergency by increasing guarantee authorisations and by introducing a variety of measures to enhance the liquidity of companies. The guarantees do not directly increase central or general government expenditure but they will increase the risks to general government finances as ultimately, the guarantee losses will be covered from public funds. The capitalisation

and loans granted to companies also involve the risk of insolvency and that, in the end, they will become general government liabilities.

The situation of laid-off and unemployed individuals has already been improved in previous supplementary budgets by eliminating the unemployment security waiting period and by streamlining the payment of unemployment benefits. In the fourth supplementary budget proposal, further measures were introduced to improve the situation of laid-off and unemployed individuals by temporarily increasing the protected portion of the unemployment benefits and by continuing the validity of the unemployment benefit extensions already introduced. The extensions will now remain in effect until the end of 2020. Improvements have also been introduced in other areas of social security; for example, the Government has introduced an allowance for individuals who have to be absent from work because of the epidemic without receiving any pay.

The fourth supplementary budget proposal contains a wide range of new measures to support citizens. Measures will be introduced to mitigate the negative impacts of the emergency and distance learning on the welfare and learning of children and young people by increasing inputs in early childhood education and care, basic education, upper secondary education, guidance counselling and youth work. Moreover, central government transfers to municipalities will be increased by providing additional funding for services supporting the welfare of children, young people and families. The Government is also introducing measures to mitigate the harm caused by the emergency to the elderly by increasing central government transfers to municipalities to ensure the proper functioning of the services intended for the elderly.

The Government is taking measures to stimulate the economy by means of public investments, such as infrastructure projects and by increasing inputs in research, development and innovation activities, higher education, competence development and employment services. When selecting the stimulus measures, the Government is giving consideration to its environmental and climate targets. More support will be provided for public transport and wood construction, and the grants for phasing out oil heating will be increased. Funding will also be allocated for the renovation of nature sites and local recreational areas.

Some of the support measures introduced by the Government will increase central government deficit but they do not directly weaken overall general government net lending. These measures include the central government support to other general government sectors.

The epidemic and the restrictions resulting from it will burden the local government finances, which are already in a weak state. The Government will soften the impact of the epidemic on local government finances by increasing the central government transfers for municipal basic services by EUR 550 million and by increasing the discretionary central government transfers intended for municipalities affected by temporary or exceptional economic difficulties by EUR 50 million in 2020. Municipalities' share of the corporate income tax revenue will also be increased on a temporary basis. Hospital districts will also be provided with a discretionary government grant totalling EUR 200 million, which is intended to cover the costs arising from the treatment of coronavirus patients, preparations for treating them and to reduce the deficits accumulated by hospital districts.



**Table 1. Measures prompted by the coronavirus situation that will impact general government net lending**

EUR bn.	2020	2021	2022
<b>Support for enterprises:</b> grants provided for companies by Business Finland and ELY Centres, support for solvency of sole entrepreneurs, support for catering entrepreneurs, support for agricultural and natural resource economy enterprises, general cost support for companies, estimated increase in Finnvera's loss compensation	2.0	0.4	0.2
<b>Extension of unemployment security:</b> eliminating the waiting period, speeding up the layoff procedure, making entrepreneurs eligible for unemployment security, extending the payment period of startup grants, streamlining unemployment benefit payments	0.5	0.0	
<b>Extension of social benefits:</b> support for individuals arriving from other countries and parents of small children, temporary increase in social assistance	0.2	0.0	
<b>Children and young people, and wellbeing of the elderly:</b> free leisure activities, early childhood education and care, basic education and general upper secondary education, guidance counselling and youth work, student health care, ensuring properly functioning services for the elderly	0.3		
<b>Investment projects:</b> basic transport infrastructure maintenance, developing the transport network, renovation construction, and public transport support. The sums for the years 2021 and 2022 are based on a technical assumption concerning the timing of the projects.	0.3	0.1	0.1
<b>R&amp;D&amp;I, competence and wellbeing:</b> additional starting places for higher education and developing continuous learning, research appropriations for the Academy of Finland, public employment and business services and developing the service structure.	0.3	0.1	0.0
Health and social services resources and equipment purchases, and covid-19 research	0.8	0.0	0.0
Other expenditure increases arising from the coronavirus situation	0.5	0.0	0.0
<b>Expenditure increases total</b>	<b>4.9</b>	<b>0.6</b>	<b>0.3</b>
Lowering of private-sector pension contributions for the period 1 May - 31 December 2020. Funding will come from the EMU buffer fund of the employment pension scheme. The buffer fund will be augmented again by raising the pension contributions for the period 2022-2025.	-1.1	0.0	0.3
<b>All measures impacting revenue</b>	<b>-1.1</b>	<b>0.0</b>	<b>0.3</b>
<b>Total impact on net lending</b>	<b>-6.0</b>	<b>-0.6</b>	<b>-0.1</b>

Central government will also strengthen the finances of the Employment Fund by contributing to the earnings-related daily allowance paid during layoffs in 2020. The contribution corresponds to the basic daily allowance. The estimated cost is EUR 600 million. This is the first time that the state is contributing to the earnings-related daily allowance paid during layoffs. Central government will also provide employees' unemployment funds with EUR 40 million in additional funding.

Some of the support measures do not have any impact on net lending recognised in the national accounts. One-off or temporary delays in the payment of taxes and any payment postponements are recognised in the national accounts as general government revenue on an accrual basis for the year in which the payment obligation is created. They will, however, temporarily increase borrowing needs. In the fourth

supplementary budget, the easing of tax payment arrangements was expanded so that taxpayers can also seek payment arrangements for value added taxes paid between January and March 2020. The Government also proposes that the interest rate of 7% normally applying to the payment arrangements, which has already been lowered to 4%, will be further lowered to 2.5%.

**Table 2. Measures that do not have any direct impact on general government net lending**

	EUR bn.
<b>Guarantee and loan authorisations:</b>	
Increasing Finnvera's domestic financing authorisations from EUR 4.2 to EUR 12 billion. About EUR 2 billion of the existing authorisations have already been used and thus any additional funding would total EUR 10 billion.	10.0
Increasing Business Finland's lending authorisations, total increase for the period 2020-2022	0.3
State guarantees to cover Finnair's financing needs	0.5
State guarantees to shipping companies to ensure cargo traffic important to security of supply	0.6
State guarantees for the loans granted within the framework of the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE)	0.4
State guarantees for any losses arising from the Pan-European covid-19 guarantee fund to be established under the European Investment Bank	0.4
<b>Capitalisations:</b>	
injecting capital into Finnish Industry Investment for the setting up of a new stability programme	0.4
Equity investment in Finnish Minerals Group	0.5
Capitalisation arrangements in Finnair Plc	0.7
<b>Easing of payment terms:</b>	0.0
Easing of payment terms for taxes due on or after 1 March 2020 and lowering the interest on late payments from 7% to 2.5%. The easing also applies to value added tax payments due in the period January - March. Assessing the impacts of the delays of 2020 tax revenue to 2021.	2.1
Option of postponing pension contribution payments by three months	
<b>Other support measures:</b>	
Lowering of credit institutions' capital requirements	30.0
Bank of Finland's investments in commercial papers	1.0
Investments of the State Pension Fund in domestic commercial papers will be increased at most to of EUR 1 billion.	1.0
Easier reborrowing TyEL contributions	
Authorising the Financial Stability Fund to borrow funds to meet its statutory obligations concerning the deposit guarantee	2.0

## 2.2 Central government

For the first time in five years, there was no improvement in central government budgetary position in 2019. The sharp contraction of the Finnish economy this spring has weakened central government finances as the automatic stabilisers have led to higher expenditure and lower revenue. Discretionary spending increases have also substantially weakened central government budgetary position. Central government budgetary position is estimated to be EUR 16.6 billion in the deficit this year, which is more than seven per cent of GDP.

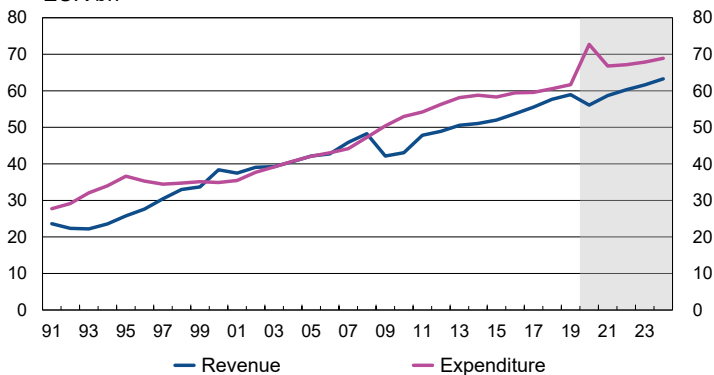
The active fiscal policy pursued by the Government has boosted discretionary spending. In the four supplementary budgets that it has introduced this spring, the Government of Prime Minister Marin has provided additional funding for social security, enterprises and economic stimulus. The supplementary budgets have also supported local government finances and contained funding for new infrastructure projects.

Central government expenditure will increase substantially this year. The largest spending increases are allocated to subsidies paid to companies and current transfers to other general government sectors. Direct additional spending allocated to the purchasing of protective equipment and other supplies in connection with the covid-19 epidemic accounts for most of the increases in consumption expenditure. Spending will also be increased by the transport infrastructure projects set out in the supplementary budgets. In addition to higher spending, central government budgetary position will also be weakened by the fall in tax revenue, a result of the economic slowdown. There will be a substantial decrease in central government tax revenue this year, compared with 2019 as the revenue from both direct and indirect taxes will fall.

Central government deficit will narrow substantially in 2021 when the abolition of the one-off spending items for 2020 will be abolished and revenue will increase rapidly. The deficit will shrink further in 2022. Despite a reduced deficit, central government budgetary position will remain substantially weaker than in the period 2017-2019.

In 2019, central government debt increased slightly compared with 2018, totalling EUR 106.3 billion at the end of the year. Substantial budget imbalance will increase the debt to nearly EUR 125 billion in 2020. From 2021 onwards, central government debt will also be increased each year by the appropriations budgeted for the fighter aircraft project of the Finnish Defence Forces. Central government debt is expected to total about EUR 138 billion in 2022, which is about 57% of GDP.

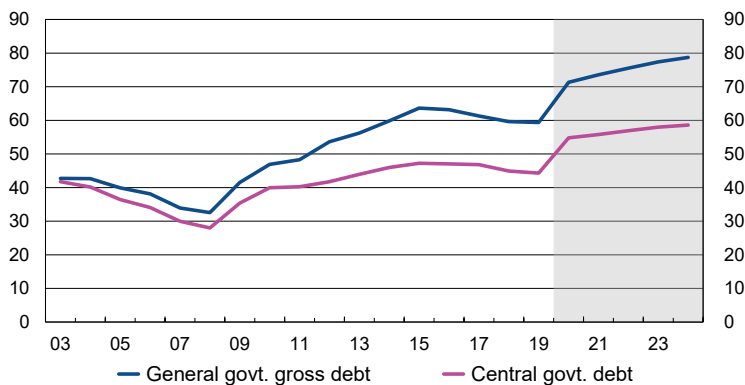
### Central government revenue and expenditure EUR bn



Sources: Statistics Finland, MoF

VM34098

### General government debt relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

**Table 16. Central government<sup>1</sup>**

	2017	2018	2019	2020**	2021**	2022**
	EUR billion					
Current taxes	14.4	14.9	15.2	13.6	14.6	15.4
Taxes on production and imports	31.6	33.1	33.6	32.6	34.1	34.8
Social security contributions	0.0	0.0	0.0	0.0	0.0	0.0
Taxes and social security contributions, total <sup>2</sup>	46.9	48.7	49.5	47.0	49.5	51.0
Other revenue <sup>3</sup>	8.9	9.2	9.6	9.2	9.2	9.3
of which interest receipts	0.4	0.3	0.3	0.3	0.3	0.3
<b>Total revenue</b>	<b>55.9</b>	<b>57.9</b>	<b>59.1</b>	<b>56.1</b>	<b>58.7</b>	<b>60.3</b>
Consumption expenditure	13.6	14.0	14.7	16.8	15.8	15.9
Subsidies and current transfers, total	39.4	40.0	40.9	49.0	44.1	44.6
to general government	28.1	28.2	28.6	34.3	31.4	32.2
Interest expenses	2.2	2.0	1.9	1.7	1.5	1.4
Capital expenditure <sup>4</sup>	4.7	4.7	4.4	5.3	5.3	5.3
<b>Total expenditure</b>	<b>59.9</b>	<b>60.8</b>	<b>61.9</b>	<b>72.8</b>	<b>66.8</b>	<b>67.2</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-4.0</b>	<b>-2.9</b>	<b>-2.8</b>	<b>-16.6</b>	<b>-8.1</b>	<b>-6.9</b>
Primary balance <sup>5</sup>	-2.2	-1.2	-1.2	-15.3	-6.9	-5.8

1) As calculated in the National Accounts

2) Incl. capital taxes

3) Incl. capital transfers (excl. capital taxes) and consumption of fixed capital

4) Gross fixed capital formation and capital transfers

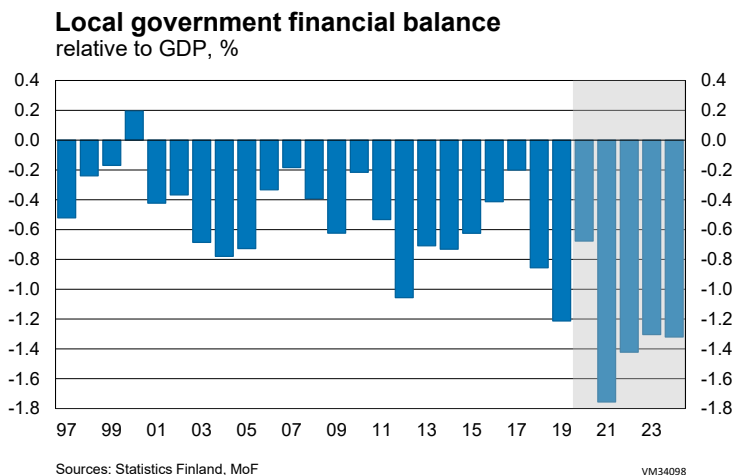
5) Net lending before net interest expenses

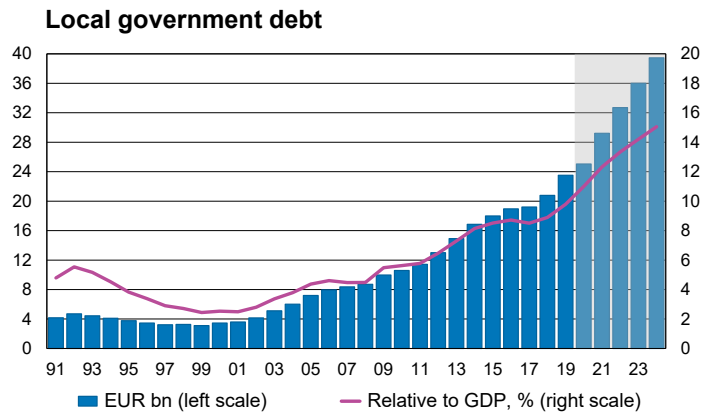
## 2.3 Local government

Local government budgetary position has weakened substantially during the past two years. The current year will also be a challenging one due to the already difficult situation of local government finances, and the increase in expenditure and the decrease in revenue caused by the downturn and the covid-19 epidemic. In addition to the epidemic, local government expenditure is increased by, among other things, the increase in health and social services spending arising from the ageing of the population and the changes in tasks outlined in the Government Programme of Prime Minister Marin. The costs arising from the new tasks and additions to existing tasks are compensated to the municipalities through central government transfers.

The Government of Prime Minister Marin has allocated a substantial package to support local government finances. The package contains a number of complementary measures and it is intended to safeguard the provision of basic services and to ensure the proper functioning of local government finances during 2020. Because of the support package, local government budgetary position will be strengthened this year but it will nevertheless remain substantially in the deficit.

The economic projection of local government finances for 2021-2024 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 2021-2024. They will only be included in the projection after the budgets have been finalised. Municipal tax rates have been kept at 2020 levels.





Sources: Statistics Finland, MoF

VM34098

Despite the economic recovery, local government deficit will widen in 2021 compared with the current year. This is mainly due to the collapse of local government revenue after the temporary package to support local government finances has expired. Consumption expenditure will rise at a more moderate rate compared with 2020 when the additional inputs required by the covid-19 epidemic are removed. However, it is estimated that some health care treatment queues will be transferred from the current year to 2021 because non-urgent treatments have been postponed as a result of the extensive coronavirus restrictions. The pay rises agreed for the municipal sector in June 2020 will also boost cost increases. Most of the pay rises will take effect in 2021.

Local government investments are expected to remain at high level throughout the forecast period even though hospital construction will probably peak in 2021 and 2022. The investment pressures will, however, remain substantial because of the age of the building stock, infrastructure investment needs and migration. The bleak outlook for local government finances may, however, lead to postponement or cancellation of the final investment decisions, as more emphasis must be given to the prioritisation of investments.

There will be a slight improvement in the local government budgetary position in 2022, compared with 2021 but it will remain substantially in the deficit. The structural imbalance of local government revenue and expenditure is increasing the debts of the local government sector. Local government debt-to-GDP ratio rose to 9.8% in 2019. Because of local government deficits, the debt ratio will continue to grow at a rapid rate throughout the forecast period.

**Table 17. Local government<sup>1</sup>**

	2017	2018	2019	2020**	2021**	2022**
	EUR billion					
Taxes and social security contributions	22.8	22.5	23.2	23.9	23.8	24.5
of which municipal tax	19.1	18.8	19.4	19.9	20.1	20.6
corporate tax	1.9	1.9	1.9	2.0	1.7	1.9
real estate tax	1.8	1.8	1.9	1.9	1.9	2.0
Other revenue <sup>2</sup>	18.8	19.4	19.6	22.9	21.4	22.4
of which interest receipts	0.3	0.3	0.3	0.3	0.3	0.3
transfers from central government	13.9	14.2	14.3	17.3	15.7	16.6
<b>Total revenue</b>	<b>41.6</b>	<b>41.8</b>	<b>42.7</b>	<b>46.8</b>	<b>45.2</b>	<b>46.9</b>
Consumption expenditure	34.4	35.7	37.0	39.1	40.0	41.0
of which compensation of employees	21.0	21.4	21.9	22.7	23.2	23.6
Income transfers	2.7	2.6	2.7	2.9	2.9	3.0
of which social security benefits and allowances	0.7	0.7	0.8	0.8	0.8	0.8
subsidies and other transfers	1.9	1.8	1.9	2.0	2.0	2.0
interest expenses	0.1	0.1	0.1	0.1	0.1	0.2
Capital expenditure <sup>3</sup>	5.0	5.5	6.0	6.4	6.5	6.3
<b>Total expenditure</b>	<b>42.0</b>	<b>43.8</b>	<b>45.7</b>	<b>48.3</b>	<b>49.4</b>	<b>50.3</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>-0.5</b>	<b>-2.0</b>	<b>-2.9</b>	<b>-1.5</b>	<b>-4.2</b>	<b>-3.5</b>
Primary balance <sup>4</sup>	-0.6	-2.2	-3.1	-1.7	-4.3	-3.6

1) As calculated in National Accounts

2) Incl. capital transfers and consumption of fixed capital

3) Gross capital formation and capital transfers

4) Net lending before net interest expenses



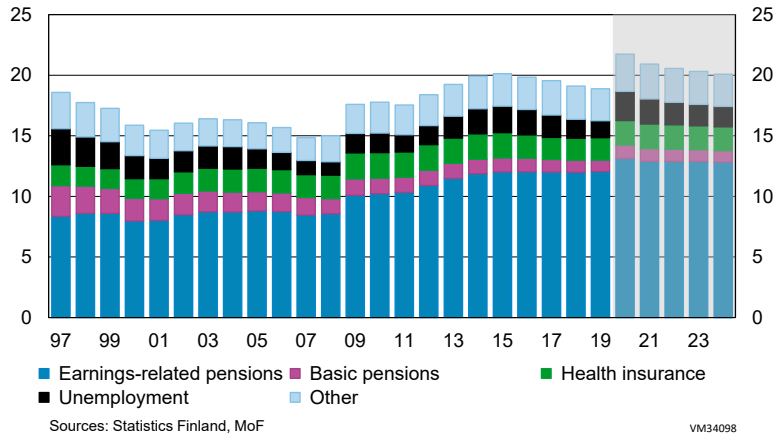
## 2.4 Social security funds

Employment pension funds posted a surplus of 0.9% in relation to GDP last year. This year, the surplus will disappear as the downturn has led to a decrease in employment pension contributions. The employers' TyEL contribution rate has also been temporarily lowered and the arrangement will remain in effect until the end of this year. The reduction will have an impact of slightly more than one billion euros. In return, the rate will be increased in the period 2022-2025, which will strengthen the financial position of the sector to about 0.4% of GDP. Employment pension assets contracted in the first quarter of this year but the asset values have already recovered substantially from this low point. As a result of the downturn and general fall in interest rates, the dividend and interest income of the sector has decreased, however.

Other social security funds posted a surplus of 0.3% last year. There will be a rapid increase in unemployment benefits this year mainly due to a record rise in the number of laid-off employees. The number of layoffs is expected to fall rapidly but they will probably remain at high level next year. Benefit expenditure is also boosted by a wide range of temporary improvements in the conditions and coverage of unemployment security. Other benefits have also been improved on a temporary basis this year. Lowering of the unemployment insurance contribution, which entered into force at the start of this year, will also reduce the income of the sector. Insurance contributions are also reduced as the wage bill decreases.

Other social security funds will post a deficit this year even though central government will exceptionally provide more than EUR 0.6 billion for unemployment security by contributing to the funding of earnings-related benefits paid during layoffs and to the financing of employees' unemployment funds. The sector will remain slightly in the deficit over the next few years but the deficit will shrink as we approach the mid-2020s and as unemployment will gradually fall. The cyclical buffer of the Employment Fund will contract as the fund posts a deficit.

### Benefits, allowances and medical care reimbursements relative to GDP, %



**Table 17. Finances of social security funds<sup>1</sup>**

	2017	2018	2019	2020**	2021**	2022**
	EUR billion					
Investment income	3.9	4.1	4.0	3.7	3.7	4.1
Social security contributions	27.3	27.9	28.3	26.7	28.8	29.6
of which contributions paid by employers	17.6	17.6	17.5	15.9	17.6	18.2
contributions paid by insured	9.7	10.3	10.8	10.8	11.2	11.4
Transfer from general government	15.8	15.5	15.6	18.9	17.4	17.2
Other revenue	0.4	0.3	0.5	0.5	0.5	0.5
<b>Total revenue</b>	<b>47.4</b>	<b>47.8</b>	<b>48.4</b>	<b>49.8</b>	<b>50.4</b>	<b>51.5</b>
Consumption expenditure	3.5	3.6	3.8	4.0	4.2	4.3
Social security benefits and allowances	37.6	38.0	38.5	42.5	42.3	43.0
Other outlays	3.4	3.3	3.2	3.9	3.8	3.7
<b>Total expenditure</b>	<b>44.5</b>	<b>44.9</b>	<b>45.5</b>	<b>50.3</b>	<b>50.3</b>	<b>51.0</b>
<b>Net lending (+) / net borrowing (-)</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>-0.5</b>	<b>0.2</b>	<b>0.5</b>
Earnings-related pension schemes	2.2	2.3	2.2	-0.1	0.7	0.9
Other social security funds	0.7	0.6	0.7	-0.4	-0.6	-0.4
Primary balance <sup>2</sup>	1.9	1.7	1.8	-1.5	-0.8	-0.6

1) As calculated in National Accounts

2) Net lending before net interest expenses





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