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#### **EDITORIAL**

# Bar raised for economic policy – demographic trend and public debt weigh on national economy

15 Jun 2021 - Bank of Finland Bulletin 3/2021 - Finnish economy

According to the Bank of Finland's new forecast, the COVID crisis will not cause a substantial long-term drop in the Finland's GDP. This is clearly good news. Generally, when the economy returns to growth following a deep economic crisis, output does not return to the pre-crisis trend, but to a lower trajectory. This time we expect the outcome will be better. In this respect, the extensive, strong economic policy response to the crisis can be considered a success. The public finances will, however, be left with a long-term scar.



Public debt has grown rapidly during the crisis, and we can expect the debt will continue to grow in the immediate years ahead even after the acute crisis has passed, unless new decisions are taken to strengthen the public finances. With the forecast indicating the cyclical situation next year will be better and the economy growing, fiscal policy should be directed towards improving sustainability. A return to spending limits in practice without unnecessary delay is fundamental to the sustainability of the public finances and the credibility of the spending limits system.

If we look a little further forward, the economic outlook is weaker than in previous decades. We are facing the same opportunities for growth and the same questions around the sustainability of the public finances as before the crisis, but in respect of the latter we could unfortunately be facing more difficult times.

Finland's problem is visible in the trend of the past 15 years, when we have lagged well behind the pace of the other Nordic countries. And there is no sign that this lost ground will be recovered in the future. The demographic trends make Finland's position worse.

How have we arrived in this situation? Why has Finland's economy lagged behind? The international financial crisis of just over a decade ago paralysed international economic developments for several years. But the other Nordic countries faced the same external environment as Finland. So this does not explain Finland's weaker performance relative to our Nordic neighbours.

In addition to the sluggish international economy, the Finnish economy also experienced several other blows. The electronics and forest industries both experienced a contraction. Other industries did not quickly expand to fill the gap. One reason for the contraction was a more rapid rise in labour costs than elsewhere, which weakened cost-competitiveness and the profitability of export production. The situation was not helped by the decline in the Russian economy. In addition to these setbacks, Finland's workingage population has been contracting since 2010, which has weakened the economy's opportunities for growth.

The Finnish economy's ability to produce new success stories to replace the past glories has also undoubtedly been weakened by factors other than the aforementioned weakening of cost-competitiveness. The causes are likely to lie in the structure of the economy and the economic policies pursued.

Here, we must ask one question. Is it time for us in Finland to stop explaining our problems by reference to the events of 10–15 years ago? Is it time to acknowledge the facts and begin to determinedly address our weaknesses that the Nordic comparison so clearly reveals?

The problems in the economy can be divided into three factors that together determine GDP, and by extension the ability of the public finances to bear debt. These factors are labour productivity, the employment rate and demographic trends.

Average labour productivity was growing relatively rapidly in Finland before the financial crisis, but since the crisis it has been almost stationary.

A contributory factor behind the weak productivity development has been the decline of the electronics industry. Average productivity development in other industries, too, has been weak since the financial crisis when compared with other advanced economies.

Another associated factor has been the weakness of corporate investments in productive capacity. Recent surveys hold out the promise of an improvement, which is positive in itself, but because of the uncertainties surrounding them they do not change the overall picture.

Inputs in research and development, which support innovation and hence productivity growth, have declined in Finland relative to GDP during the past 10 years. The contraction in electronics has had a major impact here, too, but even leaving that to one side, average corporate investment in R&D has been rather weak relative to other

advanced economies.

Taking into account how weak Finland's productivity development has been, there would be good grounds to now increase the incentives to invest in innovation. Extensive and permanent tax incentives for R&D investment would be a good option. This would give general support to the opportunities of different industries and companies to develop their productivity.

Of key significance in regard to innovations and labour productivity is competence and the level of skills. One worrying trend during the past 15 years has been the fact that the average educational attainment of young adults has begun to decline. This is another trend that needs to be reversed.

In contrast to the picture regarding labour productivity, in regard to changes in the employment rate Finland has not lagged behind in Nordic comparisons during the past 15 years. The actual rate has, however, remained well below that of the other Nordic countries. It is questionable whether a Nordic welfare state can be sustainably funded without a higher employment rate, in view of the growth in the population share of elderly people.

Although Finland's employment rate has indeed risen, particularly among older cohorts, even there it is relatively low. This is one segment of the population for whom it would make sense to seek to encourage a higher rate of employment. Another such group is young adults, for whom the transition from education to working life is not always without its problems. In Finland, the proportion of young adults who are neither in work nor in education has during the past 10 years been the highest amongst the Nordic countries.

In addition to productivity and the employment rate, a third factor that influences GDP is the size of the working-age population. In Finland, this began to decline a good 10 years ago as the post-war baby-boom generation began to reach retirement age.

If we look ahead beyond the next few years, there is no reason in general to expect major differences between the advanced economies in respect of changes in employment rate or labour productivity. In contrast, in regard to demographic developments we can anticipate the future on the basis of the current age structure of the population. The contraction in the working-age population can be expected to continue.

Demographic developments will be influenced by immigration. For decades already more people have been moving to Finland than have been leaving. However, net immigration has been much lower than in the other Nordic countries.

Of course, demographic developments could in the years ahead differ from expectations, in respect of both fertility and net immigration. Immigration in particular can also be influenced by policy decisions, and rapidly.

All in all, Finland's prolonged lagging behind economic developments in the other Nordic countries is the sum of many factors. In part, it has been the result of bad luck. In addition, the structures of the economy have not always made it easy to adjust to the

changed situation. Policy measures have not been effective enough in encouraging change. Fiscal policy has on average been exceptionally expansive, but the problems have been such that the fiscal policy stimulus has been unable on its own to provide a solution.

In order to bring about a sustained improvement in the outlook, structural reforms must continue. There is a particular need for measures that can raise Finland's employment rate to a good Nordic level. Without new initiatives, the public finances will continue on an unsustainable footing and economic wellbeing threaten to lag permanently behind our Nordic neighbours.

Differences in currency arrangements do not seem to directly explain the differences in economic performance among Nordic countries. The Danish crown has been strictly tied to the euro, while the Swedish crown has floated. In both countries, economic developments have been more positive than in Finland. For a small economy, the euro brings stability to both exchange rates and interest rates. Success requires that the workings of the labour market and the structures of the economy support adjustment when circumstances change.

We cannot decide in Finland on a new rise for the electronics industry or the Russian economy. On the other hand, decisions taken in Finland can influence the incentives for R&D activities, the education system and immigration in pursuit of employment. It is also possible to influence the opportunities for entrepreneurship, new companies' possibilities to challenge old ones, the possibilities for bargaining at local level, employment incentives, Finnish residents' opportunities to move in search of work and the arrival of skilled foreign labour in Finland. I raised these issues already in the government discussion on spending limits in April. The lost ground relative to the other Nordic countries can be recovered, and the economy's ability to adapt to changed circumstances can be improved.

All in all, demographic trends and the inflated public debt now set the bar even higher for economic policy. Recent years have seen several important reforms in the economy in response to the increasingly difficult situation and deteriorating outlook. However, we still need many new decisions. There is a key role for reforms that can boost employment and strengthen the public finances.

Thus, it is largely in our own hands whether we can manage the type of reforms that would bring Finland's economy and employment back onto a Nordic trajectory that can secure the future of our welfare society.

Helsinki, 14 June 2021

Olli Rehn Governor of the Bank of Finland

#### **Tags**

age structure, COVID-19, COVID-19 crisis, employment, productivity

#### FORECAST FOR THE FINNISH ECONOMY

## Finnish economy takes off as pandemic eases

Today - Bank of Finland Bulletin 3/2021 - Finnish economy

Economic growth will gather pace across the board as the pandemic eases. Strong consumer confidence, together with the release of pent-up demand, will support household consumption. Finnish exports will rapidly rise back towards pre-pandemic levels as export markets revive, with investments also supporting economic growth. The Finnish economy will grow 2.9% in 2021 and 3.0% in 2022. This fast pace of growth will, however, be only temporary, and in 2023, GDP growth will slow to 1.3%, reflecting the lacklustre longer-term growth prospects of an ageing economy.



The international economic operating environment is again more favourable. The world economy has continued to recover, with global monetary and fiscal policy stimulus supporting growth prospects. Finnish exports are bouncing back to pre-pandemic levels on the back of a considerable strengthening of global demand. The European Central Bank (ECB) continues to pursue strong monetary accommodation, and the low level of funding costs will bolster household consumption and corporate investment over the forecast years. A rise in commodity prices and stronger consumer demand will, nevertheless, push up prices notably this year, threatening to curb growth worldwide. However, the strong rise in prices is expected to be temporary.

The Finnish economy will begin to grow in response to a pick-up in private consumption. The robust increase in household consumption during the forecast years will be supported by an easing of the COVID-19 situation, recovery on the labour market and the

release of pent-up household demand. In 2020, households put an exceptionally large share of their disposable income into savings, while the household loan stock continued to expand, and the debt-to-income ratio climbed to around 130%. During the past few years, growth in household financial assets has outpaced growth in financial liabilities, and this trend has been sustained during the COVID-19 pandemic (see Public purse carried households and businesses through the COVID crisis). The accumulation of household wealth will give private households more room for manoeuvre and may help buoy private consumption already in the forecast years. During the pandemic, households' room for manoeuvre has been sustained by the low level of interest rates, reflected in for example mortgage rates. Interest rates are expected to remain low in the immediate years ahead.

Corporate profitability has remained good on average during the pandemic, except in services, which have suffered directly from COVID-19. As uncertainty recedes, productive investments will begin a swift recovery. In particular, the brisk revival of export markets will improve the future outlook for business. In the immediate years ahead, profitability may, however, be restricted by a rise in commodity prices and difficulties in deliveries faced by world trade. Companies' investment opportunities will also be enhanced by their good financial position. Real interest rates have remained low and access to corporate loans has not been constrained to any significant degree. As profitability has remained good and investments have been modest, corporate sector indebtedness has even decreased during the pandemic. Over the longer term, however, the pace of investment will still be held back by unfavourable demographics and weak productivity growth.

The COVID-19 crisis will temporarily dampen the economic growth potential. After the crisis, potential growth will improve but remain modest because of structural factors in the economy. However, cyclical conditions will improve rapidly, with the output gap turning positive towards the end of the forecast horizon.

The labour market outlook is relatively bright. Strong economic growth will pave the way for employment growth and, as services recover, we can expect the growth to generate lots of jobs. However, in various surveys an increasing number of companies report they are already suffering from a shortage of suitable labour. In fact, the mismatch between jobs and unemployed jobseekers may hold back the recovery of the labour market. For a large number of people unemployment has become protracted, which makes finding employment more difficult. Moreover, the working-age population continues to shrink. Reflecting these factors, employment growth will moderate towards the end of the forecast horizon as both laid-off persons and more easily employed persons will have already landed a job. On the back of favourable cyclical developments, the unemployment rate will drop below the rate of structural unemployment at the end of the forecast period.

Inflation will pick up in 2021 amid rising commodity prices and growing consumer demand. Inflation expectations have remained moderate, and consumer price inflation will level off in 2022–2023 as the effect of temporary factors wanes. Growth in wages is expected to hold fairly stable at 2% per annum in the forecast years. Given this, forecast data point to a slight loss of cost-competitiveness relative to the euro area, whereas in 2020 Finland's cost-competitiveness seems to have strengthened somewhat.

The general government deficit will remain large. General government debt relative to GDP will continue to grow in 2021 despite the brisk pace of GDP growth and falling interest rate expenditure. In 2022, growth in the debt ratio will moderate temporarily, but the debt ratio will turn up again in 2023, reaching around 73%.

In the forecast, the greatest uncertainty still relates to the progress of the pandemic. As long as the pandemic is not brought under control everywhere in the world, it has the potential of disrupting production chains and holding back global economic growth. The most significant upward risk relates to household behaviour. If households start to deploy the savings accumulated during the pandemic, economic growth may even be stronger than projected, and the pace of inflation higher.

Table 1.

Key forecast outcomes							
Percentage change on the previous year	2019	2020	2021 <sup>f</sup>	2022 <sup>f</sup>	2023 <sup>f</sup>		
GDP	1.3	-2.8	2.9 (2.6)*	3.0 (2.7)*	1.3 (1.2)*		
Private consumption	0.7	-4.9	3.3	4.6	1.3		
Public consumption	2.0	2.3	2.4	-0.9	0.7		
Private fixed investment	-1.6	-4.6	1.3	3.7	2.6		
Public fixed investment	2.3	3.4	2.7	1.5	1.4		
Exports	6.7	-6.6	5.9	5.5	3.0		
Imports	2.2	-6.6	5.4	5.3	3.1		
Effect of demand components on growth							
Domestic demand	0.6	-2.8	2.6	2.9	1.4		
Net exports	1.7	0.0	0.2	0.1	-0.1		
Changes in inventories and statistical error	-1.0	0.0	0.0	0.0	0.0		
Savings rate, households, %	0.5	5.6	3.5	0.4	0.1		
Current account, %, in proportion to GDP	-0.3	0.3	-0.1	-0.1	-0.2		
* March 2021 forecast.							
Sources: Statistics Finland and Bank of Finland.							

## Operating environment: assumptions and financial conditions

The growth outlook for 2021 and 2022 is strong both for the global economy and in the euro area. The rapid global economic growth will be a boon to Finnish exports. However, the COVID-19 pandemic continues to overshadow the outlook for both the Finnish and the global economy, even though the increasing vaccine coverage inspires hope that the pandemic is receding. The recovery of the global economy has got off to a good start but progress will be largely determined by the virus situation. The pandemic is not yet over,

and will continue to impact the economy until the virus has been brought under control all over the world. The forecast is based on data available on 25 May 2021.

#### Global economy recovers in shadow of pandemic

The global economy has continued to pick up. The COVID-19 pandemic slowed the recovery in some of Finland's trading partners in early 2021, which slightly slowed growth in demand for Finnish exports (Chart 1). Nonetheless, global demand has increased and world trade has already passed its pre-pandemic peaks in terms of both value and volume. The global monetary and fiscal stimulus has also supported growth conditions. So, while there is still considerable uncertainty surrounding the pandemic, the overall sentiment in the global economy is positive.

The recovery of demand on the Finnish export market will increase from the second quarter onwards, thereby supporting Finland's exports and overall economic growth. The demand for Finnish exports will exceed its pre-pandemic peak already in 2021. On the other hand, the increase in raw material prices and increasing consumer demand will clearly raise world market prices in 2021 (Table 2), which threatens to weaken real growth. However, the strong rise in prices is expected to be only temporary.

Chart 1.





Sources: CPB, Eurosystem and Bank of Finland.
\*Imports in the countries Finland exports to, weighted by their share of Finland's exports. The dashed line represents the underlying forecast assumptions on growth in the export markets.

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The global economy is bouncing back from last year's exceptionally deep recession to strong growth in 2021 (Table 2), as vaccinations gradually bring the COVID-19 pandemic under control. Additionally, in many countries economic activity has suffered less over the last few quarters than during the first wave in spring 2020. The cause for this could be, for example, the adoption of new practices and the support measures in force. In 2023, global growth will stabilise close to the long-term average of around 3.5%. Nevertheless, the future development of the global economy still hinges crucially on the coronavirus situation and how countries around the world manage to contain it.

The new wave of the COVID-19 pandemic slowed the recovery in the euro area early in

the year. However, growth in the euro area will strengthen noticeably over the remainder of the year, as the pandemic is expected to recede more permanently with the increasing vaccine coverage. [1] Economic growth is driven by the strong recovery of private consumption and the easing of supply bottlenecks. According to the pandemic assumptions underlying the forecast, declining infection rates should allow a significant unwinding of the containment measures in the second half of 2021. The assumption is that the pandemic situation will allow a full relaxation of the containment measures in early 2022.

Euro area GDP will grow strongly in 2021–2022 as the epidemic recedes and pent-up demand is released. In addition to strong growth in household consumption, business investment and net exports will support growth, especially in the current year. Euro area GDP is projected to exceed its pre-pandemic level in the first quarter of 2022. Euro area inflation is expected to accelerate to 1.9% in 2021, driven by temporary upward factors, before returning to rates of around 1.5% in 2022 and 2023. At the moment, containment measures and fears of the spread of the virus continue to limit the conditions for economic growth. The fading of the pandemic also enables the normalisation of activities in the sectors most affected by it, consequently stimulating growth in many trading partners important to Finland.

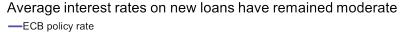
#### Accommodative financial conditions support growth

The European Central Bank (ECB) has kept monetary policy highly supportive of growth in early 2021. Purchases under the pandemic emergency purchase programme (PEPP) will continue until at least the end of March 2022 and, in any case, until the ECB judges that the COVID crisis phase is over. Monthly net purchases under the asset purchase programme (APP) will also continue and the refinancing operations will continue to provide ample liquidity. Interest rates remain low. The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.00%, 0.25% and -0.50% respectively. The Governing Council expects the key ECB interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within its projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics.

Financial conditions in Finland have remained accommodative and supportive of growth. The average interest rates for both new corporate loans and new housing loans remain moderate (Chart 2). The financial markets expect euro area short-term interest rates to remain low (Table 2). Continued low funding costs will support economic growth also through the forecast years. According to the Bank Lending Survey (BLS), credit standards have not changed significantly in early 2021. According to the Business Tendency Survey by the Confederation of Finnish Industries EK, financial difficulties have not become a particularly significant obstacle to output or sales over the last few quarters.

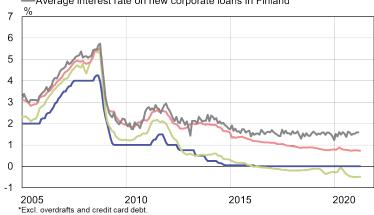
 $<sup>1.\</sup> More\ detailed\ information\ on\ the\ euro\ area\ forecast\ is\ available\ at\ https://www.ecb.europa.eu/pub/projections/html/index.en.html$ 

#### Chart 2.



—12 month Euribor

Average interest rate on new housing loans in Finland
 Average interest rate on new corporate loans in Finland\*



Sources: European Central Bank, Reuters and Bank of Finland.

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Table 2.

Forecast assumptions					
Volume change year-on-year, %	2019	2020	2021 <sup>f</sup>	2022 <sup>f</sup>	2023 <sup>f</sup>
Euro area GDP	1.3	-6.76	4.61	4.69	2.11
World GDP	2.7	-2.9	6.0	4.3	3.5
World trade*	0.8	-8.7	10.0	5.5	3.7
Finland's export markets, % change**	1.5	-8.6	8.7	5.8	3.5
Oil price, USD/barrel	64.0	42.3	65.8	64.6	61.9
Export prices of Finland's competitors, euro, % change	1.6	-4.0	4.1	1.3	1.0
3 month Euribor, %	-0.4	-0.4	-0.5	-0.5	-0.3

Finland's nominal effective exchange rate\*\*\*

USD value of one euro

Sources: Eurosystem and Bank of Finland.

106.0 108.7

1.14

1.12

110.1

1.21

110.2

1.21

110.2

1.21

<sup>\*</sup>Calculated as the weighted average of imports.

<sup>\*\*</sup>The growth in Finland's export markets is the import growth in the countries Finland exports to, weighted by their average share of Finland's exports.

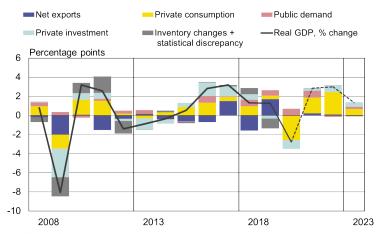
<sup>\*\*\*</sup>Broad nominal effective exchange rate, 2015 = 100. The index rises as the exchange rate appreciates.

#### Demand and the public finances

The easing of the pandemic will boost economic growth across a broad front (Chart 3). Private consumption will be supported by returning consumer confidence and the release of pent-up demand. With the recovery of the export markets, Finnish exports will rapidly return towards pre-crisis levels. Economic growth will also be bolstered by fixed investments and construction.

#### Chart 3.

#### Economic recovery led by private consumption



The GDP growth contribution of each demand component has been calculated on the basis of its volume growth and its value share in the previous year. The figures for 2021–2023 are forecasts.

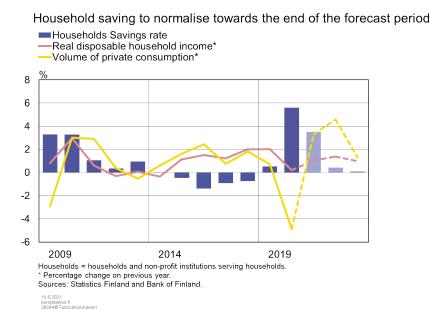
Sources: Statistics Finland and Bank of Finland.

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#### The economy will recover, led by private consumption

Consumer confidence in both the Finnish economy and their own economic position has strengthened markedly in the early part of 2021, reflecting progress with the vaccination programmes and signs on the horizon that the pandemic could be receding. Private consumption will grow by 3.3% in 2021 and by 4.6% in 2022 (Chart 4). In 2023, the pace will slow to 1.3%. The strong growth in private consumption over the forecast horizon will be underpinned by the anticipated easing of the virus situation in Finland and the release of pent-up demand.

Chart 4.



Private consumption will also gain support from the recovery of the labour market once the pandemic is over. The employment rate will improve during the forecast period, pushing up household earnings. At the same time, average hourly earnings will grow at an average annual rate of slightly over 2%. On the other hand, growth in household purchasing power will be curbed by inflation, which will accelerate to 1.7% in 2021 and will stand at 1.6% at the end of the forecast period. Household purchasing power, i.e. real disposable income, will grow at an average annual rate of about 1% during the forecast period.

The net savings rate of households, i.e. the ratio of net savings to net disposable income, jumped exceptionally high in 2020. The COVID-19 pandemic has significantly curbed household consumption expenditure, but at the same time there has been a slight increase in households' disposable income. The savings rate will still be above average in 2021, at about 3.5%, but will fall substantially in 2022, once households' consumption expenditure grows with the receding of the pandemic. In spite of this, the savings rate will remain slightly positive until the end of the forecast period.

The household sector's financial assets have grown faster in recent years than financial liabilities and the trend has continued during the pandemic. As a result, the household sector's net financial assets, i.e. the difference between financial assets and liabilities, have increased, and, at the end of 2020, households' net financial assets relative to disposable income were in fact historically high (See Public purse carried households and businesses through the COVID crisis). Higher net assets will widen households' financial margin, with the potential of supporting private consumption over the forecast horizon. During the pandemic, households' financial margin has also widened on account of the low level of interest rates, which has been reflected, for example, in mortgage interest rates. Interest rates are expected to remain low during the forecast period.

#### Investment will resume growth

Corporate profitability during the pandemic has remained good, on average, with the exception of the services industries directly affected by the crisis. The capital-intensive forestry and metal industries have weathered the crisis particularly well. However, the uncertainty caused by the pandemic has led companies to postpone or cancel their investments. As uncertainty fades, fixed investment will begin to recover rapidly (Chart 5). The swift recovery of the export markets, in particular, will boost companies' future prospects.

Since companies are in a good financial position, this will also improve their investment opportunities. Real interest rates have remained low, and the ECB's Bank Lending Survey suggests that the availability of corporate loans has not deteriorated. On the back of good corporate profitability and low investments, the corporate sector's indebtedness has even decreased during the pandemic (See Public purse carried households and businesses through the COVID crisis).

Construction will begin to grow again in 2021. Construction investment will be supported by brisk housing market activity, especially in the greater Helsinki area and other growth centres. The number of new residential construction projects has been on the increase in recent months, and the number of building permits granted has also risen markedly in the early part of 2021.

Private investment will resume growth of just under 1.5% in 2021. Investment growth will strengthen to almost 4% in 2022 and will only decelerate slightly in 2023. In the longer term, however, the pace of growth will be curbed by unfavourable demographic trends and weak productivity growth.

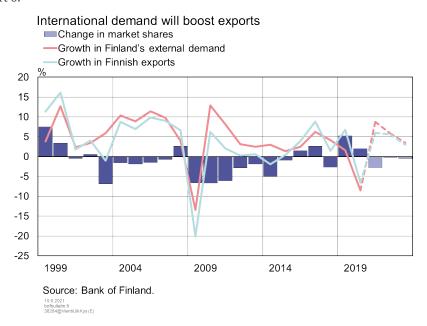
Chart 5.



#### International demand will boost exports

Finland's exports contracted significantly in 2020 on account of the pandemic-induced weakness of international demand. The overall contraction on the previous year was over EUR 6 billion, or 6.6%. Exports declined especially following the slump in services exports in spring 2020. Exports will begin to recover swiftly in 2021, however, and growth will also be brisk in the next few years, pulled by the export markets.

Chart 6.



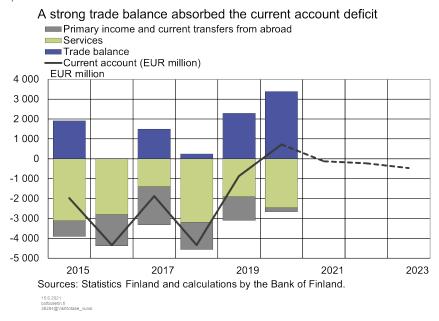
With the strengthening of international demand, Finnish exports are rapidly returning towards pre-crisis levels. Overall, Finnish exports will grow by almost 6% in 2021 (Chart 6). The favourable trend in demand for Finnish exports will also continue in 2022, when exports of goods and services will reach a growth of over 5% and surpass the pre-crisis level of 2019. After the fastest growth spurt in the export markets, export growth will slow to 3% towards the end of the forecast period.

The Finnish export industry uses imported inputs to a considerable degree, and hence imports play an important role in the production of export goods and services. In addition to exports, imports will be bolstered by higher investments and growing household consumption. In the forecast, imports will grow at almost the same rate as exports and will surpass the pre-crisis level in 2022. Net exports will support economic growth only marginally in 2021 and 2022.

The current account entered surplus in 2020 after a long period of deficit. The services balance exceptionally shifted to surplus at the end of the year, as the value of services exports increased more than the value of services imports (Chart 7). Despite this, the deficit on services deepened in 2020. On the other hand, primary income – e.g. asset income – outflows from Finland were lower than in previous years, and this strengthened the primary income balance. Due to a substantial surplus on trade balance in the last quarter of 2020, the current account recorded a surplus also in annual terms. However, the normalisation of the economic situation will mean that the current account

will post a slight deficit during the forecast period.

Chart 7.



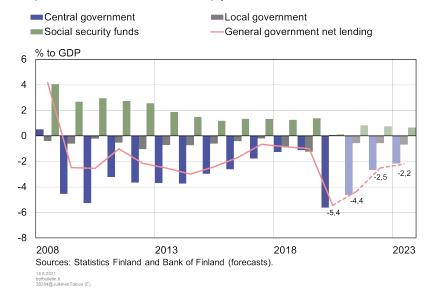
#### Public finances to remain deeply in deficit

General Government revenue from taxes and social security contributions will rebound in 2021 from the drop seen in the previous year once economic growth strengthens and the support measures to reduce social security contributions come to an end. However, due to the expenditure increases decided by the Government and expenditure on unemployment benefits, the general government finances will remain firmly in deficit in 2021 (Chart 8). In 2023, the deficit will be about 2% relative to GDP. [2]

<sup>2.</sup> The forecast takes into account the Government's first supplementary budget for 2021 and the second supplementary budget proposal.

Chart 8.

The public finances will remain deeply in deficit



Revenues from value added tax and excise duties will grow swiftly during the forecast period, fuelled by the strong increase in private consumption. With the wage bill increasing and corporate income tax receipts returning to their pre-crisis level, income tax revenues will also grow sharply. Meanwhile, social security contributions collected will be boosted by the increase in unemployment insurance contributions and the end of the temporary reduction in the earnings-related pension contribution for private-sector employers.

The pandemic-related healthcare expenditures and other support measures already decided will push up the cost of public service provision. On the other hand, social and healthcare services customers have been cautious, which has resulted in a service and healthcare backlog. This will gradually begin to clear in the latter half of 2021, and especially in 2022. In response to the pandemic-related and stimulus measures, the volume of public consumption will continue to grow sharply in 2021, as in the previous year, and will then decrease momentarily in 2022. Growth in public investment will be sustained by the Government's discretionary measures and municipal construction investments. Subsidies received by companies and entities to compensate for the effects of the restriction measures will remain high in 2021. Support from the EU Recovery Package in 2021–2027 will be targeted at companies and households as investment subsidies and at public investments and other expenditures.

The heaviest burden of the pandemic-related health security and stimulus measures are borne by the State, which will be reflected as a deep deficit in central government finances. Local government finances will also shift back to deficit when transfers from central government return closer to pre-crisis levels. [3] The financial position of the earnings-related pension providers will be bolstered by higher pension contributions and

<sup>3.</sup> The forecast does not take account of the impact of the health and social services reform on central and local government obligations and revenue as the laws on the reform are still under preparation.

also by stronger growth of property income following the crisis. Other social security funds will return to a slight surplus once the number of persons furloughed falls back and the temporary extensions to unemployment benefits come to an end.

Because of the negative primary balance, <sup>[4]</sup> public debt relative to GDP will continue to grow in 2021, despite strong GDP growth and declining interest expenditure. In 2022, however, growth in the debt-to-GDP ratio will slow temporarily as the primary balance improves and GDP maintains its strong momentum. Growth in debt will be partly due to the pandemic-related financial transactions, such as capital injections and loans, and the acquisition of equipment by the Defence Forces. On the other hand, the need for borrowing will be reduced by, for example, the sale of state shareholdings related to future-oriented investments in 2021 and 2022. The debt ratio will grow further in 2023, to about 73%.

#### Supply and cyclical conditions

The COVID-19 crisis will dampen the economy's growth potential only temporarily. After the crisis, growth in potential output will strengthen, but will remain modest due to structural factors in the economy. The cyclical situation will improve rapidly, and the output gap will turn positive in the immediate years ahead. Employment will increase as demand recovers early in the forecast period. The Finnish economy will have some production bottlenecks and labour shortage problems during the forecast period.

#### Employment will recover as demand is restored

The labour market will recover as the COVID situation eases and demand is restored. During the forecast period, the employment rate will increase by some 2 percentage points from the level of 2020, i.e. to slightly under 73%. The number of employed will increase, and at the end of the forecast period, there will be some 63,000 more persons employed than in 2020. In 2021, the unemployment rate will decline only slightly below the level of the previous year, i.e. to 7.7%. On the back of favourable cyclical developments, the unemployment rate in 2022 and 2023 will be noticeably lower, at slightly below 7%.

The recovery in employment in the early part of the year has been slowed by the pandemic situation and the associated restrictive measures and health concerns, particularly in the labour-intensive service industries. Both the decrease in unemployment and the rapid decline in furloughs slowed down. The number of those on full-time furlough reached a peak in May 2020 and was approximately 170,000, and in April 2021 the number was still nearly 54,000.

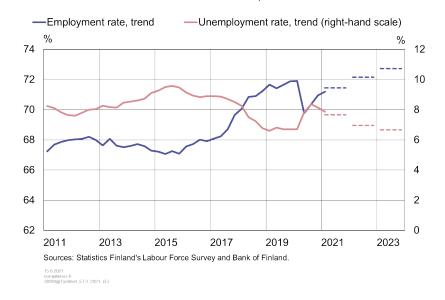
The outlook for the labour market is relatively bright. Employment growth will accelerate slightly in the early part of the forecast period, as workers furloughed in the service industries can return to work rapidly as demand grows. The number of job vacancies relative to the number of unemployed has risen, and an increasing number of companies are reporting a shortage of suitable labour. This data indicates a growth in labour

<sup>4.</sup> The difference between public revenue and expenditure excluding the impact of interest payments.

demand but also mismatch problems between vacant jobs and unemployed jobseekers. Long-term unemployment has increased by 40,000 persons during the year, and protracted spells of unemployment make it more difficult to find a job. The working-age population will continue to shrink in 2021 and in the coming years. Due to these factors, growth in employment will slow towards the end of the forecast period, as those furloughed and the unemployed persons more easily employed will have already found a job. On the back of favourable cyclical developments, the unemployment rate will fall below the level of structural unemployment at the end of the forecast period.

Chart 9.

The labour market will recover as the pandemic recedes



#### Slow growth in potential output

Due to the COVID-19 pandemic, the Finnish economy was suddenly pushed into a deep recession last year. As a result of the recession, the output gap turned some 3% negative. <sup>[5]</sup> The weakening of service sector activity had a considerable impact on the sudden deepening of the output gap. The economic <sup>[6]</sup> cycle is now rapidly turning more favourable, reflecting hopes for the ending of the pandemic and global economic recovery. The current crisis is expected to slow the economy's potential rate of growth only temporarily. Potential growth will recover from its dip during the crisis, reflecting the recovery of investment and the easing of the disruptions in supply chains. <sup>[7]</sup> GDP growth is estimated to be close to its long-term potential rate by the end of the forecast period.

<sup>5.</sup> The difference between GDP and potential output is referred to as the output gap, and it is usually expressed as a percentage of potential output. A positive output gap cannot be maintained without upward pressure on wages and prices

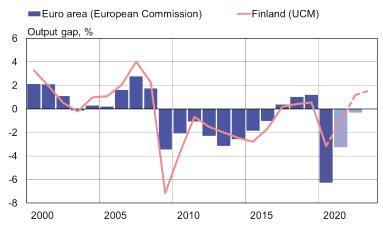
<sup>6.</sup> Poor performance in the service industries had a huge impact on the sudden widening of the output gap when COVID-19 made its presence felt in the spring. (Pönkä and Sariola (2020) The depths of the COVID-19 crisis, and the recovery, Bank of Finland Bulletin 6/2020).

<sup>7.</sup> Potential output is the volume of GDP when all the inputs in the economy are in normal use.

The COVID-19 pandemic pushed the euro area economy, too, into a deep recession in 2020. However, even at its worst, Finland's output gap remained markedly smaller than the euro area output gap and more moderate than during the financial crisis (Chart 10). Cyclical conditions will improve both in the euro area and in Finland during the forecast period. In 2022, Finland's output gap will turn positive. Reflecting improvements in the cyclical situation, the Finnish economy will have some production bottlenecks and labour availability problems during the forecast period.

Chart 10.

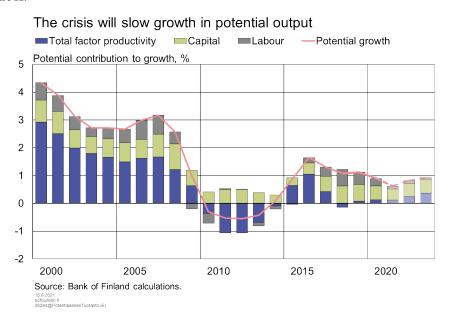
#### Finland and the euro area in a deep recession



Finland's output gap assessed with the aid of an Unobserved Components Model (UCM). Sources: European Commission and calculations by the Bank of Finland.

The crisis will slow growth in potential output temporarily (Chart 11). Even though economic growth will return to pre-crisis rates in the medium term, the level of potential output will remain slightly lower than forecast before the pandemic. Growth in the capital stock has been slow during the pandemic, due to the weakness of investment, which will erode potential output. The capital-intensive manufacturing sector has, however, coped with the crisis better then feared, and, going forward, the pick-up in capital investment will bolster the capital stock and potential output. The increase in long-term unemployment and the slight rise in structural unemployment caused by the pandemic will reduce the importance of labour as a source of potential output during the forecast period. Labour supply will be constrained also by the decrease in the working age population (15-74-year-olds). Growth in total factor productivity will remain subdued temporarily, due to disruptions in supply chains and lags in the reallocation of resources. In addition to an immediate shortage of components, the pandemic may for example force companies to find new subcontractors and employees to move from withering companies to successful ones. Structural rigidities and frictions in the economy will play an important role in how effectively economic resources are reallocated and how quickly potential output improves.

Chart 11.



#### Prices, wages and costs

Inflation will pick up in 2021, reflecting higher commodity prices and growth in consumer demand. The rise in consumer prices will, however, level off in 2022–2023, as the impacts of temporary factors fade. Growth in nominal earnings will be 2.3% in 2021 and will remain at over 2% during the forecast period. Compensation per employee, i.e. the price of labour, will increase over 4% in 2021, following the slight contraction in 2020, but the rate of increase will slow, to some 2% in 2023. Finland's cost-competitiveness improved relative to the euro area in 2020, but based on the forecast figures, the achieved advantage will be lost in 2021–2023.

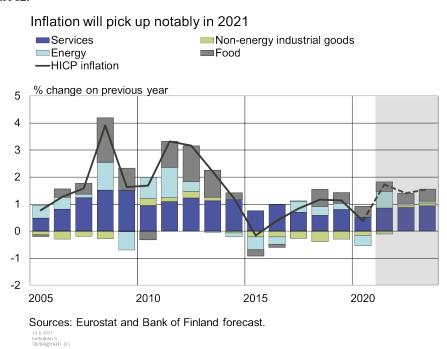
#### Consumer price inflation will pick up temporarily

Inflation has been rising since the early months of 2021. The annual rate of change in the harmonised index of consumer prices (HICP inflation) was in April over 2%, compared with only 0.2% in December 2020. The higher rate reflects in particular the rise in energy prices in response to the return of the price of crude oil to the pre-pandemic level. Services inflation, too, rose in April, to over 2%. This was partly due to the exceptionally low level of prices in April last year, as a result of which the rise in the prices of transportation services and package holidays, in particular, was strong in April. Services inflation is, however, expected to remain strong also in the coming months, due to growth in services consumption as the pandemic recedes and the related containment measures are eased.

Inflation is projected to pick up to 1.7% in 2021 (Chart 12). Energy prices are expected to rise by nearly 7% per annum, as fuel prices are much higher than last year. Higher commodity prices and freight costs will partly spill over to the prices of consumer goods and food, but, on the other hand, the moderate price expectations for commodities do not indicate a persistent rise in inflation. In the baseline forecast, inflation will level off

as the impacts of temporary factors fade, but the outlook is subject to significant risks that are related to developments in the pandemic as well as commodity and import prices, bottlenecks in supply chains and the unwinding of accrued savings (see Alternative scenario: Households use their savings more quickly than anticipated).

Chart 12.



In 2022, inflation will slow to 1.4%. The upward trend in energy prices, in particular, will slow compared with 2021, as the rise in crude oil prices will no longer fuel inflation in the same manner as in the current year. Reflecting growth in consumption and improvements in the cyclical situation, price pressures will, however, increase, as a result of which underlying inflation will pick up to 1.6%, driven by higher services prices. The inflation forecast for 2023 is 1.6%. Due to the slowdown in economic growth, the rise in consumer prices will not accelerate significantly from the previous year.

#### Steady growth in earnings during the forecast period

Growth in nominal earnings will accelerate slightly in 2021, to an estimated 2.3% (Chart 13). The rate of growth is also expected to remain at over 2% in 2022–2023. The forecast is based on the technical assumption that the pace of growth in real wages in 2020–2023 will be broadly the same as the growth in productivity. Growth in real earnings will slow to below 1% in the current year as inflation picks up. The price of labour, measured in terms of compensation per employee, will rise by over 4% in 2021, following the slight decline in 2020. The fluctuation is due to pandemic-related factors, in particular the ending of the temporary reductions in private sector employer pension contributions. In the following years of the forecast period, the rate of increase in the price of labour will slow to some 2%.

#### Chart 13.

# Steady growth in earnings during the forecast period —Compensation per employee —Average hourly earnings, national accounts —Index of wage and salary earnings —Nominal unit labour costs % 10 8 6 4 2 0 -2

Sources: Statistics Finland and Bank of Finland.

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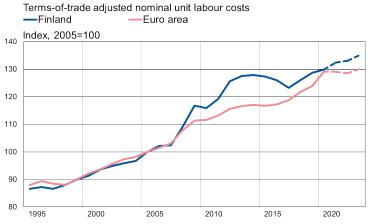
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Nominal unit labour costs will increase by some 2% in 2021. The rise in compensation per employee will accelerate the increase in unit labour costs, which, on the other hand, will be dampened by the improvement in labour productivity. The levelling off in the upward trend of the price of labour will, however, also slow the increase in unit labour costs towards the end of the forecast period. Due to the impacts of the COVID pandemic, estimates of developments in cost-competitiveness are still subject to significant uncertainty. Forecasts for unit labour costs for the economy as a whole indicate a slight weakening of Finland's cost-competitiveness relative to the euro area in the forecast period 2021–2023, whereas, based on the same indicator, cost-competitiveness improved slightly in 2020 (Chart 14).

2021

#### Chart 14.

### Unit labour costs adjusted for terms of trade will grow slightly relative to the euro area



Sources: Statistics Finland, Eurostat, and Bank of Finland and ECB forecasts June 2021.

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## Risk assessment: Pandemic still poses a threat to economic recovery

Overall, the risks in the forecast are close to balanced. The greatest uncertainty in the forecast period still relates to developments in the pandemic. Global infection rates are still high, and a too fast re-opening of the economy may lead to a rapid deterioration in the situation and another tightening of the containment measures. Over the next few years, new variants of the virus may lead to new infection waves even after the vaccinations have been completed. The greatest upside risk in the forecast relates to the behaviour of households. The economy could actually grow faster than forecast if in the years ahead households begin to spend the savings they have accumulated during the crisis.

Despite progress in the vaccination programme, we have not yet fully defeated the pandemic. The effectiveness of vaccines against new, possibly yet unknown variants of the virus may prove to be lower than hoped, and total vaccination coverage may also remain too low to completely eradicate the disease. Until the COVID situation is controlled globally, the pandemic may slow down global economic growth and disturb production chains.

The greatest upside risk in the forecast relates to the consumption behaviour of households over the next few years. During the crisis, Finnish households have accumulated around EUR 9 billion in savings due to reduced opportunities to consume. According to the baseline forecast, the household savings rate will return to normal, but the accumulated savings are not expected to be released in the immediate years ahead. If households begin to spend their accumulated savings, for example on private consumption or the housing market, the economy could grow faster than expected over the forecast horizon (Alternative scenario: Households spend their savings faster than expected).

On the other hand, households may be more cautious than usual even after the containment measures are lifted, especially in the consumption of services. The economic impact of the pandemic has also been spread very unevenly between households. Some households have suffered major income losses while most have accumulated savings. Large differences between households and unevenly accumulated savings increase uncertainty and make it more difficult to estimate the recovery rate of consumption. If most of the savings have been accumulated by wealthier households, there is no reason to expect a large-scale channelling of savings into consumption, even after the pandemic fades.

Economic recovery combined with strong growth in demand threaten to accelerate inflation globally. The upward pressure on prices is increased by rapidly rising commodity prices and bottlenecks in supply chains. The semiconductor shortage has already caused issues in the supply of electronic devices. Inflation in Finland and the euro area has accelerated during spring 2021, but more moderately than in the United States. In addition, euro area inflation expectations have risen slightly in recent months, although they remain notably lower than in the United States.

The acceleration of inflation and shortage of skilled labour may increase the pressure to

increase wages in the next round of collective bargaining negotiations in autumn 2021. A significant wage hike combined with prolonged strong demand could lead to a more substantial increase in inflation expectations, which in turn would serve to drive faster inflation. Another contributing factor could be fiscal policy, which remains very accommodative relative to the economic cycle. In addition to inflationary pressures from abroad, the rise in consumer prices may be accelerated by the release of Finnish households' savings into domestic consumption, which could speed up services inflation, in particular.

So far, there are no signs of a longer-term acceleration of inflation, and, if the price increases driven by international demand and bottlenecks in supply chains are only temporary, the risk of them being reflected in other cost factors, such as wage demands, will diminish. As temporary factors fade and long-term growth prospects remain subdued, there is even a risk that price inflation will be slower than forecast.

Stimulus measures have offered significant support to the economy through the crisis, but, as the measures are wound down, their impact on economic growth will inevitably be only temporary. At the same time, general government indebtedness has grown strongly both in Finland and in other countries, increasing the vulnerability of the economy and reducing the room for manoeuvre in fiscal policy. Additionally, the longer-term structural challenges of the Finnish economy – such as the sustainability gap in the public finances and the ageing of the population combined with weak productivity – remain unresolved.

#### **Tags**

COVID-19, COVID-19 pandemic, economic forecast, economic growth, forecast, households, uncertainty

#### **ALTERNATIVE SCENARIO**

## Households use their savings more quickly than anticipated

Today - Bank of Finland Bulletin 3/2021 - Finnish economy



Samu Kärkkäinen Economist



Hannu Viertola Senior Economist

The COVID-19 pandemic and resulting lockdown measures have imposed severe constraints on the consumption opportunities of households, and demand has especially collapsed in a number of service industries. Households have accumulated a significant amount of savings since early 2020 due to the shortfall in consumption caused by the pandemic. The release of these savings into private consumption or housing demand over the next few years may result in economic growth proving much stronger than anticipated in the baseline forecast.



Statistics on disposable household income and private consumption suggest that households have accrued a total of about EUR 9 billion in savings over the past 1½ years. In this alternative scenario, excess savings are defined as the difference between the amount of household savings estimated in the Bank of Finland's June 2021 forecast and its December 2019 forecast.

The household saving rate has risen exceptionally high during the pandemic, to over 6%,

based on an estimate covering the last three quarters of 2020. Disposable household income has also continued to rise in spite of the pandemic, albeit at a more moderate pace.

Although households have accumulated a significant amount of savings during the pandemic, a portion of these savings may have already been invested in 2020, for example in shares (see: Public purse carried households and businesses through the COVID crisis). There is uncertainty as to how this particular portion of savings might influence private consumption or housing demand in the short term, especially if households have purchased shares with the intention of investing over a longer period. Hence it is possible that not all of the excess savings will be spent on consumption in the short term.

Household consumption is the most significant determinant of output growth and its fluctuations in the short term. Private consumption corresponds to roughly half of GDP. Higher consumption is instantly reflected in the volume of GDP, and it also bolsters employment and investment over slightly longer periods.

In this alternative scenario, we use the Aino 3.0 model<sup>[1]</sup> to estimate what effects the unwinding of households' excess savings might have on output growth and its composition in the coming years, as well as its impact on inflation. The estimates do not take the public finances into account. Changes in consumption and residential investment are examined with the Bank of Finland June 2021 forecast serving as the baseline. The particular baseline path does not change the dynamics or the main results of the model.

The model's estimated effects rise proportionately with how much of the excess savings are assumed to be spent on consumption during the forecast period and how quickly the savings are run down. This, in turn, depends on consumer behaviour and changes in consumer preferences. For example, consumers may remain cautious for a long time, normalising their consumption and running down their savings only gradually once uncertainty begins to lift.

There is considerable uncertainty as to when consumers will begin running down their savings and to what extent. In the alternative scenario, it is assumed that about 60% of the excess savings will be spent on private consumption and housing during 2021–2023. <sup>[2]</sup> This assumption of 60% is further broken down so that private consumption receives about 40% of the excess savings and housing demand about 20%. These percentage shares roughly translate to just over EUR 3.5 billion of additional consumption and just under EUR 2 billion of increased housing demand. Housing

<sup>1.</sup> Aino 3.0 is the Bank of Finland's latest dynamic stochastic general equilibrium model, which includes a depiction of the housing market. See Silvo & Verona (2020) The Aino 3.0 model, Bank of Finland Research Discussion Papers 9/2020.

<sup>2.</sup> Because the model is numerically solved by taking linear approximations, the dynamic effects remain the same whether it is assumed that all of the excess savings are spent or only 60%, as assumed by the alternative scenario. However, the assumption regarding savings does affect the magnitude of the estimated effects. If households were to run down all of their excess savings, i.e. EUR 9 billion, the estimated impact on output would rise in proportion with the increase in consumption.

demand will grow more rapidly than private consumption, as the influx of savings going into housing is proportionately larger.

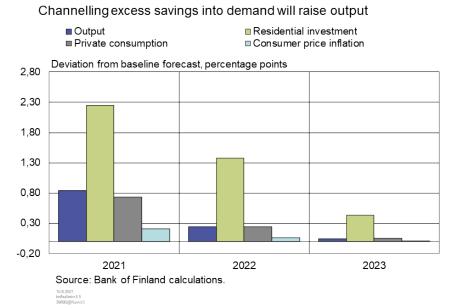
It is assumed that inflation will pick up globally due to stronger demand and short-term supply constraints, and that this will accelerate the rise in the export prices of Finland's competitors during the forecast period. The higher export prices of competitors will influence the Finnish economy through the foreign trade channel, i.e. through the prices of imports and exports.

## Running down savings will accelerate output growth

The premise of the alternative scenario is that the COVID-19 pandemic will begin to recede as vaccination coverage increases after mid-2021 and will result in a lifting of general uncertainty. Private consumption is assumed to increase by a total of about one percentage point more over 2021–2023 than in the baseline forecast. This assumption is based on a simple calculation where the path of private consumption in the baseline forecast is raised by EUR 3.5 billion and the resulting percentage point deviation is calculated from the baseline. In the alternative scenario, consumption is 0.7 percentage points higher in 2021 than in the baseline forecast (Chart 1).

As housing demand strengthens this will lead to a rise in residential investment. From housing demand it is assumed that the cumulative deviation in residential investment growth from the baseline forecast will be about 4 percentage points over 2021–2023. This roughly corresponds to about EUR 1.8 billion of additional residential investment compared with the baseline forecast. The model estimates that residential investment growth will be about 2.2 percentage points higher in 2021 than in the baseline forecast and that it will gradually decelerate towards its baseline path.

Chart 15.



Higher private consumption and residential investment will raise the growth rate of output 0.8 percentage points above that of the baseline forecast. Over the entire forecast period, output will cumulatively be about 1 percentage point higher than in the baseline forecast. The higher export prices of Finland's competitors will raise non-residential investment in Finland.

The rise in output will significantly boost employment. The number of hours worked will increase, and real wages will grow slightly. Imports will also grow, as higher consumption and investment will increase the demand for imports. Imports will also be bolstered by stronger global demand for exports. Net exports will thus remain neutral and will not contribute to output growth.

Inflation will be only slightly faster than in the baseline forecast; however, the alternative scenario may underestimate the inflationary pressures caused by consumption. This may especially be true in situations where a rapid rise in consumption leads to excess demand and supply is not able to keep pace with the rapid changes in demand. In the model, a rise in the demand for housing leads to higher residential investment but also raises the real prices of housing, as the nominal prices of housing increase faster than the general price level. Although the model does not take regional differences in the housing market into account, price rises are conceivable, especially in growth centres.

The calculations demonstrate that growth in household consumption and strengthening housing demand have a markedly positive impact on output growth. In Finland, savings accumulated by households have often trickled towards housing demand, so we may well assume this to be the case once the economy has sufficiently recovered from the crisis.

The model allows for the elasticities of output and consumer price inflation to be estimated with respect to private consumption. That is, we can estimate how much output or inflation will change when private consumption increases and all other factors are held constant.

According to the model, the elasticity of output with respect to private consumption is about 0.5 during 2021–2023 and in consumer price inflation (with respect to private consumption) 0.4. These estimates are smaller than long-term elasticities calculated using time series covering Finland's euro membership. The model's estimate for the elasticity of output with respect to residential investment is about 0.7 over 2021–2023, and for consumer price inflation<sup>[3]</sup> about 0.6. These figures are similarly smaller than those estimated from the time series.

The savings accrued by households could of course flow elsewhere, such as into the stock market or foreign travel, which would reduce the amount of savings available for consumption or housing demand, especially in the short term. In addition, the prospects of future tax hikes due to the higher levels of public debt could inhibit the growth of consumption and depress housing demand.

The estimates presented in this alternative scenario are approximations and are subject to uncertainty. The actual effects of a rise in consumption may deviate significantly from

<sup>3.</sup> Corresponds to the aggregate price movement of private consumption.

the figures estimated by the model. A stronger-than-anticipated flow of savings into domestic demand would nevertheless have a favourable impact on other sectors of the economy and would raise output clearly beyond levels estimated in the baseline forecast. Overall, the estimates obtained from the model concerning output and inflation fall in line with expectations, given higher consumption growth and a rise in housing demand.

Table 1.

Key alternative scenario figures							
	2021	2022	2023	Average annual deviations in growth over 2021–2023*	Cumulative deviation in growth over 2021–2023*		
Output	0.8	0.2	0.0	0.4	1.1		
Residential investment	2.2	1.4	0.4	1.4	4.1		
Private consumption	0.7	0.2	0.1	0.3	1.0		
Consumer price inflation	0.2	0.1	0.0	0.1	0.3		
Non-residential investment	3.1	-0.4	-1.6	0.4	1.1		
Exports	0.6	0.2	0.1	0.3	0.8		
Imports	0.9	0.1	-0.2	0.3	0.9		
Real wages	0.2	0.2	0.2	0.2	0.6		
Hours worked	0.9	0.2	0.0	0.4	1.1		
Productivity (output – hours worked)	0.0	0.0	0.0	0.0	0.1		
*Percentage deviations from the baseline forecast.							
Source: Bank of Finland calculations.							

#### **Tags**

consumption, COVID-19, COVID-19 crisis, households, saving

## Public finances carried households and businesses through the COVID-19 crisis

Today - Bank of Finland Bulletin 3/2021 - Finnish economy







Samu Kärkkäinen Economist



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A large number of firms fell into distress due to the COVID-19 pandemic and many households have been significantly affected by furloughs and lay-offs. However, the nonfinancial corporations sector improved its overall profitability in 2020, and the household sector as a whole accrued savings. At the same time, the general government deficit widened. Although these developments were influenced by the substantial rise in general government subsidies, social benefits and other support in 2020, this alone would not account for the other sectors' strengthening their financial position. The positive developments in the household and non-financial corporations sectors nevertheless hide large differences within the sectors themselves.



The COVID-19 crisis has been a major shock to the different sectors of the Finnish economy. The pandemic and the ensuing containment measures and uncertainty have driven a large number of firms into distress. This has led to in a rise in furloughs and unemployment, inflicting further distress on households on top of the immediate health consequences of the pandemic. Yet a powerful policy response, which has included subsidies, a reduction in employers' social security contributions and expanded social benefits, has mitigated the shock on the household and non-financial corporations sectors.

In spite of the distress experienced by many households and firms, the national accounts compiled by Statistics Finland reveal that both sectors have, in aggregate, improved their financial position during the pandemic. By contrast, the financial position of the general government sector has weakened. In this article, we look at the income and expenditure of these sectors in 2020 and examine whether general government carried the other sectors during the pandemic, or whether there are other reasons for why the non-financial corporations and household sectors improved their financial positions.

General government support to the household sector and non-financial corporations sector rose significantly in 2020, but this by itself does not account for the strengthening of their financial positions. Households accumulated savings in aggregate, as private final consumption expenditure fell during the COVID-19 crisis. In the non-financial corporations sector, profits rose despite a considerable contraction in value added, as employers' labour costs were reduced (due to outright layoffs, furloughs and reduced social security payments) and firms received public subsidies. At the same time, firms cut back on their distribution of profits and investment.

Although the financial positions of the household sector and non-financial corporations sector have strengthened during the pandemic, we should stress that an analysis based on a sectoral approach hides large discrepancies within the sectors themselves. The pandemic shock was felt very differently by different firms and their employees in different industries, resulting in growing heterogeneity within the non-financial corporations and household sectors themselves.<sup>[1]</sup>

## The national accounts record the balances and interactions of different sectors

In the national accounts, the stocks and flows of the economy are recorded on the level of the national economy but also on the level of institutional sectors, groups made up of similar economic agents. <sup>[2]</sup> The main institutional sectors are the household sector, the non-financial corporations sector and the general government sector.

In the national accounts, the real (or non-financial) accounts record activity in the real economy, e.g. how labour input and other factors of production are combined to produce goods, how income is distributed in the economy, and how capital is formed. The financial accounts, in turn, record the financial assets and liabilities of the different sectors of the economy and the financial transactions which determine these stocks. Income and expenditure in the real accounts determine whether a sector is a net lender or net borrower (i.e. its budget balance or financial position), and a corresponding change is made in the financial accounts to the sector's net assets (financial assets minus liabilities).

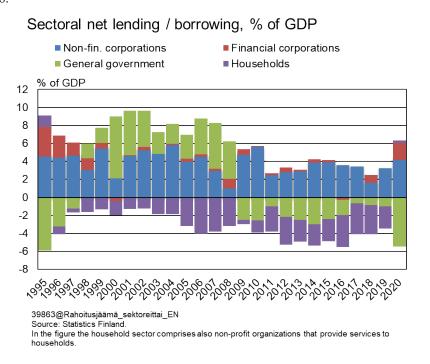
<sup>1.</sup> The authors wish to thank Arto Kokkinen for his feedback.

<sup>2.</sup> The compilation of the national accounts is guided by the System of National Accounts (latest version SNA2008), an internationally agreed standard set of recommendations, and the European System of Accounts (latest version ESA2010), which is based on EU regulation. Both frameworks define an institutional unit as an economic entity characterised by decision-making autonomy in the exercise of its principal function and, if called upon, the ability to compile a complete set of accounts. Institutional units are combined into groups called institutional sectors.

By analysing the real and financial accounts of different institutional sectors, we can track the income, expenditure, assets and liabilities of each sector and keep track of the economic interactions between sectors. The economy is often measured and forecast on the basis of supply and demand items, such as through GDP. However, a sectoral approach allows for a deeper dive into the structures and developments underpinning the economy and can thus provide useful information for economic policymaking. Monitoring the economy like this makes it easier to identify nascent problems and imbalances, as well as causes, that would otherwise remain unnoticed at the level of supply and demand.

The private institutional sectors, which include the household sector and non-financial corporations sector, strongly increased their financial position in 2020 (Chart 1), whereas the general government deficit widened much further. The following sections explore the reasons for these different paths.

Chart 16.



## Profitability of firms rose in the midst of the pandemic

A large number of firms fell into distress during the COVID-19 pandemic, especially in certain industries (for example accommodation and food service activities; transportation and storage; and arts, entertainment and recreation). Yet the national accounts by sector demonstrate that profits rose in the non-financial corporations sector during the second quarter of 2020, when the first wave of the pandemic began to spread in Finland and the government and other authorities hurried to prepare financial support packages. The rest of the year also went relatively well for the sector as a whole.

The national accounts and financial statements each use different concepts to describe

the profitability of firms and factors which affect profitability (Table 1). [3] Net operating surplus in the national accounts roughly corresponds to operating profit in a financial statement. It is obtained by subtracting the compensation of employees, taxes on production and imports (less subsidies) and consumption of fixed capital from the gross value added (output minus intermediate consumption) of a sector. The profitability of the aggregate economy or different industries is often represented in terms of profit share, which is the ratio of operating surplus over value added. [4]

Table 1.

# Rough correspondences between financial statements and national accounts

Financial statement	National accounts
Turnover, other operating income	Output at basic prices
– Variable and fixed costs excl. labour costs	<ul> <li>Intermediate consumption at purchasers' prices</li> </ul>
= Value added	= Value added, gross
<ul><li>Labour costs</li><li>Taxes + subsidies on production</li></ul>	<ul><li>Compensation of employees</li><li>Taxes + subsidies on production</li></ul>
= EBITDA	= Operating surplus, gross
Depreciation and amortisation     according to plan	– Consumption of fixed capital
= Operating income (EBIT)	= Operating surplus, net
Performance ratios	
EBITDA margin, EBIT margin	Operating surplus/output
EBIT/value added	Operating surplus/value added
EBIT / non-current assets, ROA	Operating surplus/net capital stock
Source: Ravaska (2011).	

The profitability of the non-financial corporations sector, measured in terms of profit share, increased in 2020 in spite of the sharp recession (Chart 2). In the second quarter of 2020, during the first wave of the pandemic, the seasonally adjusted profit share of the non-financial corporations sector increased markedly on the previous quarter, even though value added contracted significantly. With large-scale furloughs and a temporary

<sup>3.</sup> For a more detailed comparison of key figures in national accounts and financial statements, see Ravaska. T. (2011) "Profitability of Finnish Firms 1975–2010", BoF Online  $8 \cdot 2011$  (in Finnish).

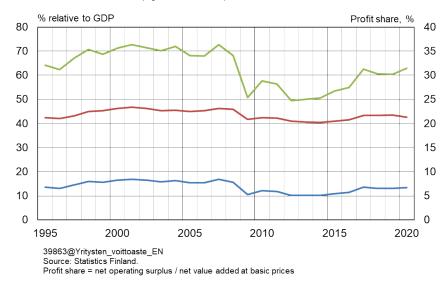
<sup>4.</sup> The profit share of the non-financial corporations sector increased markedly during the mid-1990s but weakened again after 2008. It was not until 2015 that profitability began to pick up again appreciably, but it still remained below its past peak in the years leading up to the pandemic.

reduction in pension contributions paid by private sector employers, compensation of employees declined, and firms also received financial support from the public finances (subsidies on production), resulting in a higher operating surplus and higher profit share for the sector. During the third quarter of 2020 the sector's profit share declined on the previous quarter, but still remained higher than before the start of the pandemic. Value added and paid compensation of employees recovered, but the subsidies received by the sector remained large. However, in the fourth quarter of 2020, as the second wave of the pandemic accelerated, the sector's profit share declined, as value added diminished on the previous quarter but compensation of employees remained roughly the same and firms received fewer subsidies on production than in the previous quarter.

Chart 17.

#### Profit share of firms

- —Net operating surplus, % relative to GDP (left-hand scale)
- —Net value added at basic prices, % relative to GDP (left-hand scale)
- —Profit share, % (right-hand scale)



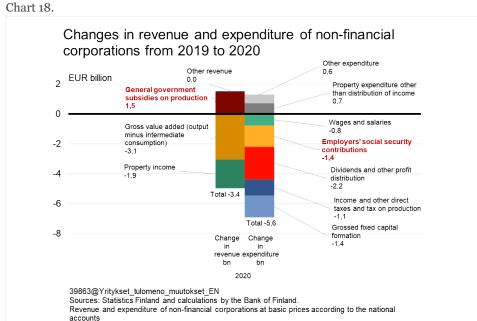
The operating surplus and profit share of the non-financial corporations sector were influenced by changes in employment and social security contributions and direct subsidies (including their timing) in addition to fluctuations in value added. Subsidies from the public purse mitigated the shock to the non-financial corporations sector. By funding the compensation of furloughed employees, general government also supported the ability of firms to retain their staff.<sup>[5]</sup>

The financial position of the non-financial corporations sector has strengthened during the pandemic. The sector's net lending, which represents its financial position, stood at

<sup>5.</sup> In addition to these measures, the payment arrangements available to firms for paying tax and employers' social contributions have been eased and their eligibility criteria extended. An attempt has been made to eliminate the deferral of tax revenues into following years due to moratoria and VAT loans from the national accounts such that the majority of the deferrals have not affected the 2020 accounts. In addition, the loan and guarantee powers of the specialised financing company owned by the State, Finnvera, were significantly expanded in 2020. The contingent liabilities are backed by central government, and central government also partially compensates Finnvera for losses incurred due to this increased financing.

4.2% relative to GDP in 2020, its highest rate since 2010. As a result, the sector's almost 30-year streak as a net lender remained unbroken.

The strengthening of the sector's financial position was in part influenced by a decline in dividends paid and in investment (Chart 3). The path of investment is particularly interesting, as investment is a key factor underpinning productivity and output growth. The sector's seasonally adjusted rate of investment, i.e. its ratio of investment over value added, still increased during the first half of 2020, but in the third quarter it declined quarter-on-quarter. In the fourth quarter, the investment rate grew moderately but still remained lower than before the pandemic. In spite of good profitability, the investment rate of the non-financial corporations sector is being affected by the uncertainty surrounding the pandemic, the restriction measures and economic developments. Indeed, investments are forecast to pick up as soon as the uncertainty has faded (see Finnish economy takes off as pandemic eases).



It should be emphasised that the aggregate improvement in profitability and net lending observed in the non-financial corporations sector during the pandemic masks wide differences between and within industries. These differences have been discussed in the in the journals Euro & talous and Bank of Finland Bulletin in articles by Vanhala (2020), Mäki-Fränti and Vanhala (2020) and Mäki-Fränti (2021).

## Household sector financial position in balance after long interlude

The pandemic has also hit the household sector hard, weakening private final consumption significantly. Private final consumption contracted substantially more than it did during the financial crisis, even though GDP fell much more then than it has during the COVID-19 pandemic. The sharp decline in private final consumption is explained on one hand by the heightened caution the health threat has instilled in consumers and, on

the other hand, the restriction measures put in place to prevent the spread of the virus and the constraints these have put on spending opportunities.

Household disposable income increased in 2020 in spite of the pandemic. Because household final consumption expenditure declined at the same time, the household sector has accumulated savings. Household savings are defined as the difference between disposable income and final consumption expenditure. The savings rate, in turn, is the ratio of savings over disposable income. The net savings rate takes into account the depreciation of capital owned by households.

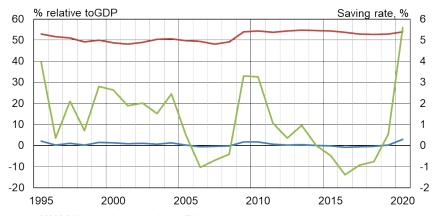
The savings rate is one of the key indicators for the household sector. The net savings of the household sector describes the amount of real and financial assets households can acquire without accumulating debt. Households can use their acquired assets to smooth out their final consumption, for example when disposable income is low because of a spell of unemployment. Final consumption smoothing is important for how sudden shocks, such as the COVID-19 pandemic, are transmitted to the economy. Finally, the savings of the household sector comprise a large share of the aggregate national savings. If there are not enough national savings to satisfy domestic investment demand, investment will be partly funded from abroad. This, in turn, has an impact on the economy's net international investment position.

The net savings rate of Finnish households has remained low and even negative during the years since the financial crisis (Chart 4). A negative savings rate means that the household sector's final consumption expenditure exceeds its disposable income. If a sector's combined capital expenditure (which includes gross fixed capital formation) and final consumption expenditure exceed its gross disposable income, the sector is said to be a net borrower. Here the sector will fund its deficit by liquidating its financial assets or taking on debt.

#### Chart 19.

## Household saving rate

Net saving, % relative to GDP (left-hand scale) Net disposable income, % relative to GDP (left-hand scale) Saving rate, % (right-hand scale)



39863@Kotitalouksien\_säästämisaste\_EN

Source: Statistics Finland.
Includes non-profit institutions serving households.

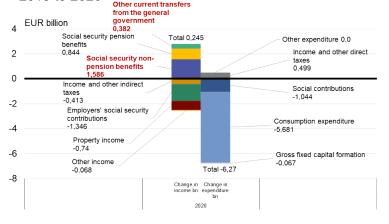
Saving rate = net saving / (net disposable income + adjustments for changes in employment-related pension entitlement).

The COVID-19 crisis has significantly reshaped the savings behaviour of the household sector. The sector's net savings rate rose to almost 6% in 2020, whereas during 2010–2019 it remained close to zero (0.3% on average). The main factor underpinning the strong rise in the savings rate has been the fall in final consumption expenditure. The other determinant of the net savings rate, i.e. the household sector's net disposable income, has evolved much more smoothly during the COVID-19 crisis than final consumption expenditure. The household sector's net disposable income relative to GDP even increased in 2020. This is because GDP has contracted, whereas disposable household income has increased slightly.

General government measures have contributed to the household sector's disposable income remaining on an even keel during the pandemic. The household sector has been supported by the discretionary measures of general government, but also by its automatic stabilisers. Automatic stabilisers are non-discretionary general government revenue and expenditure which vary according to the business cycle and smooth out fluctuations in the economy. Tax revenue – which varies according to the tax base – and unemployment insurance are examples of automatic stabilisers. In 2020, compensation of employees declined (Chart 5). However, this was offset by, for example, the rise in social benefits paid to the household sector during the crisis and the decrease in social security contributions paid by households.

#### Chart 20.

## Changes in household income and expenditure from 2019 to 2020



39863@Kotital\_tulomeno\_muutokset\_EN Sources: Statistics Finland and calculations by the Bank of Finland. Household income and expenditure at basic prices according to the national accounts. Includes non-profit institutions serving households. Other current transfers between these two sectors have been consolidated.

Where have the savings accrued by the household sector flowed? Savings can be used to acquire real assets (such as housing) or financial assets (such as bank deposits or listed shares). <sup>[6]</sup> In 2020, the household investment rate, i.e. the ratio of investment over

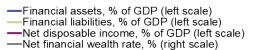
6. Households' bank deposits have grown rapidly during the coronavirus pandemic (see Household deposits growing at a brisk pace, Bank of Finland). Bank deposits comprise slightly under one-third of the total stock of households' financial assets; however, of the financial assets acquired by households in 2020, almost two-thirds were deposits, similarly to in previous years. The accumulation of savings into highly liquid assets such as bank deposits could contribute to a rise in private final consumption once the pandemic subsides.

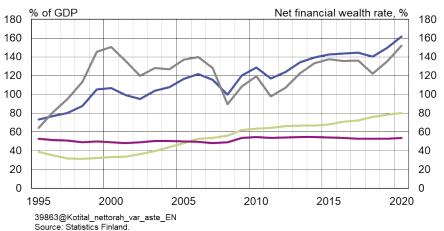
disposable income, declined only slightly. What is significant is that the household sector was a net lender in 2020, albeit only just, for the first time since the end of the 1990s. The sector's financial position being close to balance suggests that, according to the real accounts, households' savings have flowed into real assets without a significant increase in debt.

However, at the same time households have increased their financial wealth<sup>[7]</sup>, which has also been bolstered by brisk appreciations of listed share and mutual fund holdings. In addition to financial assets, the household sector's net financial position is naturally affected by its financial liabilities, i.e. its stock of debt. Household debt has consistently grown since the beginning of the 2000s. However, in recent years the growth of financial assets has been faster than the growth of liabilities, so households' net financial assets have increased. At the end of 2020, the household net financial assets-to-income ratio was at its highest ever recorded level since recording of this statistic began in 1995 (Chart 6). Although the debt ratio (debt relative to disposable income) of Finnish households is at a historical high, households also hold a significant amount of wealth, on average.

Chart 21.

#### Household net financial wealth rate





The household sector's wealth can function as a buffer, which may, for example, cushion the economic impact of higher debt-servicing costs resulting from higher interest rates. However, this may be influenced by the overall distribution of wealth within the household sector. For example, if financial assets have largely been accumulated by elderly households whose minimum final consumption expenditure is low and who do not hold large amounts of housing debt, then the wealth of the household sector may not function particularly well as a buffer compared with a situation where a significant

<sup>7.</sup> Despite the balance between income and expenditure in the non-financial accounts, the financial accounts show household net lending as standing at EUR 10.4 billion. The bottom-lines of non-financial and financial accounts should mirror each other, but discrepancies are common. The discrepancy was unusually large in 2020, however.

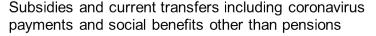
portion of wealth was also held by households susceptible to, say, fluctuations in the interest rates on housing loans. This sort of heterogeneity among households, which potentially has significant macroeconomic effects, is lost at the institutional sector level. The distribution of wealth among Finnish households in discussed in Bank of Finland Bulletin Mäki-Fränti (2019).

## General government expenditure rose sharply

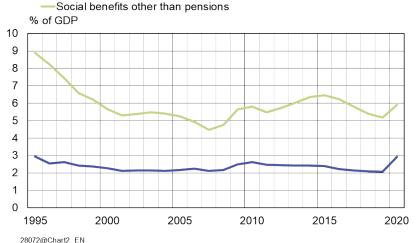
General government expenditure rose sharply in 2020 as the central government responded to the COVID-19 pandemic with health security and fiscal stimulus measures. Subsidies and transfers relative to GDP, which include discretionary virus-related and fiscal stimulus measures, increased by 0.8 percentage points in 2020 (Chart 7). At the same time, non-pension social benefits increased by 0.7 percentage points relative to GDP. Social benefits (including furlough payments) were also raised as part of the fiscal response.

In addition, general government supported firms by temporarily lowering social security contributions paid by private sector employers. This weakened the budget balances of pension funds, which are classified as general government entities.

#### Chart 22.



—Income subsidies and income transfers including Covid-19 subsidies



Sources: Statistics Finland and calculations by the Bank of Finland.

We have already established that the actions taken by general government do not entirely account for the strengthening of the private sector's balances in 2020. In a similar vein, general government's discretionary support to households and firms does not entirely account for the widening of the general government deficit.

At the same time as decisions were being made that would raise public spending, general government tax and tax-related revenues declined and unemployment expenditure increased as cyclical conditions deteriorated in 2020. The general government sector's

consolidated total revenue contracted on the previous year by one percentage point relative to GDP, while total expenditure increased by 3.4 percentage points relative to GDP. Of the widening of the general government deficit in 2020, about 60% can be traced to discretionary measures, while the remainder is the result of automatic stabilisers. <sup>[8]</sup> The resulting deficit-to-GDP ratio reached its highest level since the depression of the 1990s. Central government in particular carried the burden; its budget was severely in deficit in 2020.

# Prerequisites exist for growth in private final consumption and investment

The pandemic and associated restriction measures and uncertainty have disrupted the activities of a large number of firms and eroded the incomes of many households. The health security and fiscal stimulus measures implemented by general government have mitigated the impact of the pandemic on the non-financial corporations sector and the household sector.

In spite of the COVID-19 pandemic and the disruption caused to many firms, the non-financial corporations sector improved its profitability and financial position in 2020. While the value added created by the sector decreased, compensation of employees declined and firms received public financial support. And, although the sector's profit share ultimately increased, its dividend payments shrunk. At the same time, the investment rate declined less than had been feared. Better profitability and a stronger financial position are creating the conditions for investment growth in the coming years, as soon as the pandemic recedes and the fading of uncertainty improves the outlook for production. Recent survey data also suggest a recovery in investment. [9] The non-financial corporations sector has remained a net lender for almost three decades, which means that the sector has been able to fund its investment with its operating income. The Bank of Finland's forecast of strong gross value added growth suggests that reducing fiscal support as the pandemic recedes will not give rise to a surge in bankruptcies.

On the back of the COVID-19 pandemic, the Finnish household sector was a net lender in 2020, for the first time since the mid-1990s. The general government sector has in part contributed to the household sector's stronger financial position by supporting the disposable income of households. Yet the main reason for why the sector's financial position has become balanced is that households have significantly reduced their final consumption expenditure due to the pandemic. With final consumption having contracted but disposable income remaining broadly the same, households have accrued a significant amount of savings. It is forecast that the savings rate will return to its prepandemic levels, and this will support growth in final consumption. In addition, if households spend the savings they have accrued during the COVID-19 crisis on final consumption, this might further boost the Finnish economy's recovery from the

<sup>8.</sup> This estimate is based on the European System of Central Banks' methodology for calculating the cyclically adjusted general government balance and the Bank of Finland's June 2021 forecast.

<sup>9.</sup> Investment survey conducted by the Confederation of Finnish Industry and Employers, January 2021; Report on the impact of the COVID-19 crisis on Finnish SMEs, Finnish Industry Investment Ltd; April 2021. In Finnish only.

recession caused by the pandemic.

The figures in the national accounts are designed to reflect sectors in aggregate terms and not provide a full sweep of heterogeneity among households and firms. These figures still offer valuable insight into trends in the macroeconomy, the structure of the economy and the interactions between sectors. This information can be used e.g. as background information in economic policymaking and as a support for economic forecasting.

## **Tags**

 $companies/firms, COVID-19, COVID-19\ pandemic, households, national\ accounts, public finances$ 

## **FORECAST TABLES**

# Forecast tables for 2021–2023 (June 2021)

15 Jun 2021 - Bank of Finland Bulletin 3/2021

The Finnish economy will grow 2.9% in 2021 and 3.0% in 2022. This fast pace of growth will, however, be only temporary, and in 2023, GDP growth will slow to 1.3%.

# 1. BALANCE OF SUPPLY AND DEMAND, VOLUMES, AT REFERENCE YEAR 2015 PRICES

Volume, % change on previous year							
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>		
GDP at market prices	1.3	-2.8	2.9	3.0	1.3		
Imports of goods and services	2.2	-6.6	5.4	5.3	3.1		
Exports of goods and services	6.7	-6.6	5.9	5.5	3.0		
Private consumption	0.7	-4.9	3.3	4.6	1.3		
Public consumption	2.0	2.3	2.4	-0.9	0.7		
Private fixed investment	-1.6	-4.6	1.3	3.7	2.6		
Public fixed investment	2.3	3.4	2.7	1.5	1.4		
Sources: Bank of Finland and Statistics Finland.							

## 2. CONTRIBUTIONS TO GROWTH<sup>1</sup>

	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>
GDP, % change	1.3	-2.8	2.9	3.0	1.3
Net exports	1.7	0.0	0.2	0.1	0.1
Domestic demand excl. inventory change	0.6	-2.8	2.6	2.9	2.9
of which Consumption	0.8	-2.0	2.3	2.1	2.1
Investment	-0.2	-0.7	0.4	0.8	0.8
Inventory change + statistical discrepancy	-1.0	0.0	0.0	0.0	0.0

<sup>&</sup>lt;sup>1</sup> Bank of Finland calculations. Annual growth rates using the previous year's GDP shares at current prices as weights.

Sources: Bank of Finland and Statistics Finland.

## 3. BALANCE OF SUPPLY AND DEMAND, PRICE DEFLATORS

Index 2015 = 100. and % change on previous year									
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>				
GDP at market prices	116.9	118.8	120.6	122.3	124.3				
	1.5	1.7	1.5	1.4	1.6				
Imports of goods and services	105.5	99.9	104.3	106.4	107.8				
	0	-5.3	4.4	2.0	1.3				
Exports of goods and services	106.7	101.8	105.8	107.4	108.7				
	-0.3	-4.6	3.9	1.5	1.3				
Private consumption	114.4	114.9	116.8	118.5	120.5				
	1.0	0.4	1.7	1.4	1.7				
Public consumption	116.2	118.4	120.8	122.8	124.8				
	2.2	1.9	2.0	1.7	1.6				
Private fixed investment	120.1	121.4	123.1	125.5	128.0				
	3.2	1.1	1.4	1.9	2.0				
Public fixed investment	118.2	118.6	119.3	120.9	122.1				
	2.8	0.3	0.6	1.3	1.0				
Terms of trade (goods and services)	101.1	101.8	101.4	100.9	100.9				
	-0.7	0.7	-0.4	-0.5	-0.1				
Sources: Bank of Finland and Statistics Finland.									

## 4. BALANCE OF SUPPLY AND DEMAND, AT CURRENT PRICES

EUR million and % change on previous year									
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>				
GDP at market prices	240,261	237,467	247,914	258,850	266,603				
	2.8	-1.2	4.4	4.4	3.0				
Imports of goods and services	95,200	84,240	92,682	99,509	104,017				
	2.6	-11.5	10.0	7.4	4.5				
Total supply	335,461	321,707	340,596	358,359	370,620				
	2.8	-4.1	5.9	5.2	3.4				
Exports of goods and services	95,568	85,157	93,763	100,438	104,74				
	6.4	-10.9	10.1	7.1	4.3				
Consumption	181,701	178,373	187,102	195,247	200,650				
	2.5	-1.8	4.9	4.4	2.8				
Private	125,944	120,263	126,368	134,068	138,032				
	1.7	-4.5	5.1	6.1	3.0				
Public	55,757	58,110	60,734	61,179	62,618				
	4.2	4.2	4.5	0.7	2.4				
Fixed investment	57,318	56,041	57,606	60,549	63,104				
	2.2	-2.2	2.8	5.1	4.2				
Private	46,836	45,164	46,368	48,988	51,264				
	1.5	-3.6	2.7	5.7	4.6				
Public	10,482	10,877	11,238	11,561	11,840				
	5.2	3.8	3.3	2.9	2.4				
Inventory change + statistical discrepancy	874	2,136	2,125	2,125	2,125				
% of previous year's total demand	-0.7	0.4	0.0	0.0	0.0				
Total demand	335,461	321,707	340,596	358,359	370,620				
	2.8	-4.1	5.9	5.2	3.4				
Total domestic demand	239,893	236,550	246,833	257,921	265,879				
	1.4	-1.4	4.3	4.5	3.				

Sources: Bank of Finland and Statistics Finland.

## 5. BALANCE OF SUPPLY AND DEMAND

<b>2019</b> 100.0	<b>2020</b>	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>
100.0	100.0			2023
		100.0	100.0	100.0
39.6	35.5	37.4	38.4	39.0
39.8	35.9	37.8	38.8	39.3
75.6	75.1	75.5	75.4	75.3
52.4	50.6	51.0	51.8	51.8
23.2	24.5	24.5	23.6	23.5
23.9	23.6	23.2	23.4	23.7
19.5	19.0	18.7	18.9	19.2
4.4	4.6	4.5	4.5	4.4
0.4	0.9	0.9	0.8	0.8
139.6	135.5	137.4	138.4	139.0
99.8	99.6	99.6	99.6	99.7
	75.6 52.4 23.2 23.9 19.5 4.4 0.4	75.6 75.1 52.4 50.6 23.2 24.5 23.9 23.6 19.5 19.0 4.4 4.6 0.4 0.9 139.6 135.5 99.8 99.6	75.6     75.1     75.5       52.4     50.6     51.0       23.2     24.5     24.5       23.9     23.6     23.2       19.5     19.0     18.7       4.4     4.6     4.5       0.4     0.9     0.9       139.6     135.5     137.4       99.8     99.6     99.6	75.6         75.1         75.5         75.4           52.4         50.6         51.0         51.8           23.2         24.5         24.5         23.6           23.9         23.6         23.2         23.4           19.5         19.0         18.7         18.9           4.4         4.6         4.5         4.5           0.4         0.9         0.9         0.8           139.6         135.5         137.4         138.4           99.8         99.6         99.6         99.6

## 6. PRICES

Index 2015 = 100, and % change on previous year								
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>			
Harmonised index of consumer prices	103.6	104.0	105.8	107.2	108.9			
	1.1	0.4	1.7	1.4	1.6			
Consumer price index	103.3	103.5	105.3	106.8	108.5			
	1.0	0.3	1.7	1.4	1.6			
Private consumption deflator	114.4	114.9	116.8	118.5	120.5			
	1.0	0.4	1.7	1.4	1.7			
Private investment deflator	120.1	121.4	123.1	125.5	128.0			
	3.2	1.1	1.4	1.9	2.0			
Exports of goods and services deflator	106.7	101.8	105.8	107.4	108.7			
	-0.3	-4.6	3.9	1.5	1.3			
Imports of goods and services deflator	105.5	99.9	104.3	106.4	107.8			
	0.4	-5.3	4.4	2.0	1.3			
Value-added deflators								
Value-added, gross at basic prices	116.9	119.0	120.7	122.4	124.4			
	1.5	1.8	1.5	1.4	1.6			
Private sector	104.9	106.3	107.8	109.2	110.9			
	1.3	1.4	1.4	1.3	1.6			
Public sector	117.5	121.8	124.1	126.1	128.1			
	2.6	3.6	1.9	1.7	1.6			
Sources: Bank of Finland and Statistics F	inland.							

## 7. WAGES AND PRODUCTIVITY

% change on previous year					
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>
Whole economy					
Index of wage and salary earnings	2.1	1.8	2.3	2.0	2.3
Compensation per employee	1.3	-0.1	4.2	2.3	2.1
Unit labour costs	1.1	1.1	2.2	0.3	1.5
Labour productivity per employed person	0.2	-1.3	2.0	2.0	0.7
Sources: Bank of Finland and Statistics F	inland.				

## 8. LABOUR MARKET

1,000 persons and % change on previous year								
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>			
Labour force survey (15–74-year-olds)								
Employed persons	2,534	2,495	2,517	2,541	2,558			
	1.1	-1.5	0.9	1.0	0.7			
Unemployed persons	183	209	209	190	182			
	-9.0	14.0	-0.1	-9.1	-3.8			
Labour force	2,717	2,704	2,725	2,731	2,741			
	0.3	-0.5	0.8	0.2	0.4			
Working-age population (15–64-year-olds)	3,428	3,421	3,416	3,412	3,412			
	-0.3	-0.2	-0.1	-0.1	0.0			
Labour force participation rate, %	65.8	65.4	66.1	66.5	66.9			
Unemployment rate, %	6.7	7.7	7.7	6.9	6.7			
Employment rate (15–64-year-olds), %	71.6	70.7	71.4	72.2	72.7			
Sources: Bank of Finland and Statistics Finland.								

# 9. GENERAL GOVERNMENT REVENUE. EXPENDITURE. BALANCE AND DEBT

	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>
% of GDP					
General government revenue	52.2	51.2	51.6	51.3	51.1
General government expenditure	53.2	56.7	55.9	53.8	53.3
General government primary expenditure	52.4	56.0	55.3	53.2	52.8
General government interest expenditure	0.8	0.7	0.6	0.6	0.5
General government net lending	-1.0	-5.4	-4.4	-2.5	-2.2
Central government net lending	-1.1	-5.6	-4.6	-2.7	-2.2
Local government net lending	-1.3	0.1	-0.6	-0.6	-0.7
Social security funds	1.4	0.1	0.8	0.8	0.7
General government primary balance	-0.2	-4.8	-3.7	-1.9	-1.7
General government debt (consolidated. EDP)	59.5	69.2	71.4	71.6	72.8
Central government debt	44.3	52.6	55.2	55.7	56.9
Tax ratio	42.2	41.7	42.3	42.1	41.9
Current prices, EUR billion					
General government net lending	-2,393	-12,924	-10,800	-6,489	-5,893
Central government net lending	-2,703	-13,370	-11,456	-6,939	-5,786
Local government net lending	-3,013	175	-1,441	-1,523	-1,878
Social security funds	3,323	271	2,096	1,973	1,770
General government debt (consolidated. EDP)	142,874	164,266	176,972	185,305	194,201
Sources: Bank of Finland and Statist	tics Finland	•			

## 10. BALANCE OF PAYMENTS

EUR billion					
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>6</sup>
Exports of goods and services (SNA)	95.6	85.2	93.8	100.4	104.7
Imports of goods and services (SNA)	95.2	84.2	92.7	99.5	104.0
Goods and services account (SNA)	0.4	0.9	1.1	0.9	0.7
% to GDP	0.2	0.4	0.4	0.4	0.3
Investment income and other items, net (+ statistical discrepancy)	1.2	2.6	1.5	1.5	1.5
Current transfers, net	-2.3	-2.8	-2.7	-2.6	-2.7
Current account, net	-0.8	7.2	-0.1	-0.2	-0.5
Net lending, % to GDP					
Private sector	0.7	5.7	4.3	2.4	2.0
Public sector	-1.0	-5.4	-4.4	-2.5	-2.2
Current account, % to GDP	-0.3	0.3	-0.1	-0.1	-0.2

## 11. INTEREST RATES

%					
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>e</sup>
3-month Euribor <sup>1</sup>	-0.4	-0.4	-0.5	-0.5	-0.3
Average interest rate on new loan drawdowns <sup>2</sup>	1.6	1.5	1.6	1.6	1.7
Average interest rate on the stock of loans <sup>2</sup>	1.3	1.3	1.2	1.2	1.3
Average interest rate on the stock of deposits <sup>3</sup>	0.1	0.0	0.0	0.0	0.0
Yield on Finnish 10-year government bonds <sup>1</sup>	0.1	-0.2	0.1	0.3	0.5

<sup>&</sup>lt;sup>1</sup> Technical assumption derived from market expectations.

Sources: Bank of Finland and Statistics Finland.

<sup>&</sup>lt;sup>2</sup> Finnish credit institutions' loans to households and non-financial corporations (excl. overdrafts and credit card credits, repurchase agreements and non-recourse factoring).

<sup>&</sup>lt;sup>3</sup> Finnish credit institutions' deposits from households and non-financial corporations.

## 12. INTERNATIONAL ENVIRONMENT

The Eurosystem staff projections	2000	0000			
	2019	2020	2021 <sup>e</sup>	2022 <sup>e</sup>	2023 <sup>6</sup>
Real GDP, volume, % change on previous year					
World	2.7	-2.9	6.0	4.3	3.5
USA	2.2	-3.5	6.6	3.8	2.3
Euro area	1.3	-6.8	4.6	4.7	2.
Japan	0.0	-4.7	2.4	2.3	1.2
Real imports, volume, % change on previous year					
World	0.8	-8.7	10.0	5.5	3.7
USA	1.1	-9.3	13.6	5.6	3.7
Euro area	3.8	-9.3	8.3	7.0	3.6
Japan	1.1	-7.3	6.4	5.9	4.2
Index, 2015 = 100, and % change on previous year					
Import volume in Finnish export markets	115.0	105.2	114.4	121.0	125.2
	1.5	-8.6	8.7	5.8	3.5
Export prices of Finland's competitors (excl. oil), in national currencies	107.1	105.4	111.2	112.7	113.8
	0.9	-1.6	5.5	1.4	1.C
Export prices of Finland's industrial competitors (excl. oil), in euro	101.0	97.0	101.0	102.3	103.3
	1.6	-4.0	4.1	1.3	1.C
Industrial raw materials (excl. energy), HWWA index, in US dollars	119.0	121.2	179.9	181.1	165.
	-5.3	1.8	48.4	0.6	-8.8
Oil price, USD per barrel <sup>1</sup>	64.0	42.3	65.8	64.6	61.9
	-9.9	-33.9	55.6	-1.9	-4.
	02.0	91.6	90.4	90.3	90.3
Finland's nominal competitiveness indicator <sup>2</sup>	93.8				

## 12. INTERNATIONAL ENVIRONMENT

US dollar value of one euro <sup>3</sup>	1.12	1.14	1.21	1.21	1.21
	-5.2	2.0	5.8	0.2	0.0

<sup>&</sup>lt;sup>1</sup> Technical assumption derived from market expectations.

Sources: Bank of Finland and Statistics Finland.

## 13. CURRENT AND DECEMBER 2020 FORECAST

-2.8 -3.8 0.4 0.4 0.3 -0.7	2.9 2.2 1.7 0.9 -0.1 -0.3	3.0 2.5 1.4 1.2 -0.1 -0.4 -2.5	1.3 1.5 1.6 1.5 -0.2 -0.4 -2.2
0.4 0.4 0.3 -0.7	1.7 0.9 -0.1 -0.3	1.4 1.2 -0.1 -0.4	1.6 1.5 -0.2 -0.4
0.4 0.3 -0.7	-0.1 -0.3	1.2 -0.1 -0.4	1.5 -0.2 -0.4
0.3	-0.1	-0.1	-0.2
-0.7	-0.3	-0.4	-0.4
-5.4	-4.4	-2.5	-2.2
-7.1	-4.7	-3.2	-2.4
69.2	71.4	71.6	72.8
68.4	71.3	72.6	74.0
7.7	7.7	6.9	6.7
7.8	8.3	7.7	7.4
70.7	71.4	72.2	72.7
71.6	71.8	72.7	73.2
_	7.7 7.8 70.7	7.7 7.7 7.8 8.3 70.7 71.4	7.7     7.7     6.9       7.8     8.3     7.7       70.7     71.4     72.2

## Tags

economic forecast, Finland, forecast, GDP, indicators

<sup>&</sup>lt;sup>2</sup> Narrow, supplemented with euro area countries, January–March 1999 = 100<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> Exchange rates assumed stable during the forecast period.