



BANK OF FINLAND BULLETIN

BANK OF FINLAND ARTICLES ON THE ECONOMY

Bank of Finland Bulletin 3 • 2020

Publication dates 9 and 29 June 2020

The Finnish version was published on 9 June 2020.

Vol. 94

The Bank of Finland Bulletin is published five times a year.

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ISSN 1456-5870 (online)

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EDITORIAL

The worst-case scenario in the corona spring did not materialise, but we will still need stamina for the long haul

9 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • EDITORIAL

The corona pandemic serves as a reminder that healthy public finances provide an irreplaceable shield when we hit hard times. It is now important to both time and target the fiscal policy stimulus effectively and take forward structural reforms. Finland's labour market, too, has a vital role to play as the economy enters the recovery phase.



The economic impact of the coronavirus pandemic is now entering a new phase. During the spring, output contracted sharply as lockdown measures were imposed, limiting movement, gatherings and business activity in order to contain the spread of infection. These restrictions have now been relaxed in many countries, allowing economic output to begin to expand once again.

But there is no certainty that output and employment will suddenly take off again. Households and businesses are exhibiting caution in their consumption and investments. The financial position of many is weaker than before. There also remains a risk of the epidemic flaring up again, in Finland and elsewhere around the world.

In Finland, the brunt of the crisis fell on the service sectors, whose prospects are now being improved with the easing of the lockdown. But the export sectors are subject to a

different rhythm: in particular, the sluggishness of global investment demand is keeping the order books of many industries empty. The outlook is bleak for the export sector in the second half of 2020 and through 2021. Adding to the uncertainty is the risk to the banks of increased loan losses.

When the lockdown was in force, the role of economic policy was to build a bridge and assist households and businesses through the worst of the crisis. It was vital to prevent a wave of bankruptcies and the emergence of mass unemployment. A measure of continued support for households and businesses is still needed as long as output remains low in parts of the economy.

Now the lockdown has begun to be relaxed, a fiscal policy stimulus to support aggregate demand has become more important. Such a stimulus is useful when the main factor limiting output is exceptionally weak aggregate demand. Where necessary, even a substantial stimulus may be considered in those countries where the public finances are sufficiently strong and the long-term growth outlook is sufficiently positive.

In the advanced economies, general developments in the economy have derived significant support from the monetary policies pursued by their central banks in addition to the decisions of banking supervisors and the macroprudential authorities. By protecting the liquidity of the financial markets and securing the lending capacity of banks, these measures have safeguarded funding for businesses and households.

Coordinated measures have also been agreed at the EU level. These will address issues especially in those countries, regions and industries that have been worst affected by the pandemic and its economic impact.

The general government finances of some EU countries have become so weakened by the crisis that their ability to support output and employment risks becoming entirely compromised, simply fuelling long-term challenges to the public finances.

The Commission's recent proposal for an EU recovery instrument is in broad outline a step in the right direction, even though it will undoubtedly be somewhat changed after processing by Member States. What is needed is a one-off, temporary and carefully targeted support package that is quickly available. From a Finnish perspective it is of paramount importance that the economy of our most important export customers, i.e. the European Union, is on a stable foundation.

Looking forward, the sustainability of economic growth in Europe must be strengthened and competitiveness improved. Achievement of climate goals and acceleration of the digital economy cannot succeed without substantial investments and reforms. Stressing conditionality, this needs to be taken into account in regard to the kind of projects resources are directed into in the common European crisis measures now being planned.

With large amounts of public funds now being deployed to support national economies, there is reason to seriously consider the long-term outlook for general government finances in the EU countries, and here in Finland. It is necessary to focus – without pointless delays – on investments that will improve the future opportunities for growth and employment as well as on structural reforms in the economy.

The coronavirus pandemic serves as a new reminder that healthy public finances are an irreplaceable protection when we hit difficult times. It is now important that economic support measures are designed such that the fiscal stimulus is both timed and targeted effectively. The corona crisis should not be used to introduce permanent increases in public expenditure that will further exacerbate an already substantial sustainability gap. As normality returns, it will be more important than ever to build up our general government buffers, remembering the traditional wisdom that it is during the good times that we must prepare for the bad.

Deep economic crises often cast a lasting shadow over the economy, especially in regard to employment. A sharp rise in unemployment often means that a share of those suffering job losses will be left outside of working life for a long time, or even permanently. It can also mean that new, young graduates will be unable to find work on the labour market. This has been the experience with many previous crises. To avoid these developments, not only must the stimulus be successfully deployed during the acute phase of the crisis, but the incentives for employment must also be in place during the recovery phase. Because a deep crisis often results in permanent changes in the production structure of the economy, education and innovation policies, in particular, must be focused on the needs of the future.

In Finland, the general educational level of the population was on the rise for several decades, but this trend has been reversed during the past 10–15 years. Among young adult cohorts the level of educational attainment has turned downwards, which is exceptional in international comparison and concerning from a Finnish perspective. This trend can scarcely be considered positive, particularly when modern growth theory stresses the significance of education as a key factor in the accumulation of intangible human capital and the basis of a competent workforce, and as research data does not suggest any weakening in the returns to education. Therefore an increase in university admissions – particularly in the current weak situation in youth employment – would seem to be well-founded also from the perspective of long-term productivity development in the economy.

As soon as national economies begin to recover, Finland must ensure that our companies are able to expand their output. The key here is the functioning of the labour market. In the early stages of the crisis, the social partners embraced responsibility in an important way by supporting expedient furlough schemes. A large number of bankruptcies and many redundancies were likely avoided as a result.

Economic forecasts now suggest that the Finnish labour market will have to show its mettle in the recovery phase, too. The price of labour in Finland's main advanced trading partners is expected to decline relative to Finland in the current year and in 2021. In many countries the price of labour responds rapidly to a weakening in the condition of the economy, unlike in Finland. For a small, open economy like Finland, this could result in the loss of jobs or a failure to generate new ones.

If these forecasts hold true, the prospects for a fall in the heightened level of unemployment and growth in the employment rate in Finland will weaken. During the crisis, Finnish companies have largely opted to reduce their workforce by furloughing workers. As the lockdown is lifted and demand picks up, it is important that businesses

are once again able to offer a growing number of jobs. This will prevent temporary lay-offs from turning into widespread redundancies. These positive developments would be supported if we can prevent a renewed decline in cost-competitiveness.

Should labour costs in Finland rise faster than in other countries and not be accompanied by a proportionate rise in productivity growth, a share of export production that would have otherwise remained profitable could be abandoned in Finland. This would weaken the prospects for employment in industries in direct competition with foreign production. It would also weaken the generation of income in Finland, as well as weakening domestic demand and the desired recovery of employment in the non-tradable sector.

Economic forecasts are currently subject to a large degree of uncertainty due to the pandemic's unpredictable trajectory. This uncertainty also extends to forecasts of labour costs in different countries. We should closely scrutinise how these forecasts eventually unfold and assess how the system of collective agreements can be harnessed to secure the competitiveness of Finnish labour and output, to preserve employment.

The first months of the coronavirus crisis are now behind us, with economic policy having to respond rapidly to unprecedented circumstances. What hopefully lies ahead is a phase where lockdown measures may continue to be lifted in different countries and where output will turn from contraction to expansion.

Economy policy has responded to the crisis on many fronts, and with a force that has ensured the worst has – at least so far – been avoided. Finland has not experienced a sizeable wave of bankruptcies. Furlough schemes have meant that redundancies have remained fewer in number than initially feared.

The future nevertheless remains uncertain, and a number of important decisions on economy policy have yet to be taken.

For growth and employment to regain strength, economic policy must prove successful in responding to the immediate need for stimulus and to the increased need to support the long-term economic outlook. In Finland, key are reforms that can facilitate entrepreneurship, increase the available expertise and improve the functioning of the labour market. This will enable us to keep a grip on the rapidly growing level of public debt. Thus, the employment rate and productivity development will soon return to the economic policy agenda.

Although the worst did not materialise, we will still need stamina for the long haul, in regard to both public health and the economy.

Helsinki, 8 June 2020

Olli Rehn
Governor of the Bank of Finland

Tags

[corona](#), [coronavirus](#), [cost-competitiveness](#), [fiscal policy](#)

Finland's economy will gradually recover from the sudden shutdown

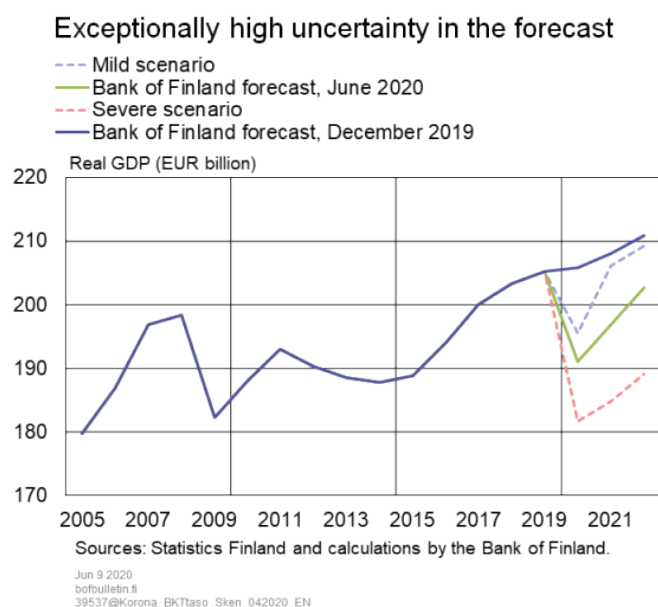
29 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • ECONOMIC OUTLOOK

The Finnish economy is experiencing a sharp contraction on account of the coronavirus pandemic. Gross domestic product will decline by around 7% this year and grow around 3% per annum in 2021 and 2022. The forecast contains an exceptionally large degree of uncertainty. According to alternative scenarios, the contraction in the economy in the current year could be just 5% or as much as 11%, depending on how the epidemic progresses in Finland and what success there is in bringing it under control. The degree of success in controlling the epidemic will also determine how quickly the economy will recover. It will probably not be possible to avoid permanent losses of output, but economic policy can be used to mitigate their scale.



The Finnish version of Bank of Finland forecast was published on 6 June 2020.

Chart 1.



The global economy will drift into recession this year, and the economies of Finland's most important trading partners will suffer considerably from the corona pandemic. The outlook for the Finnish economy is overshadowed by both the weakness of the global economy and the restrictive measures taken domestically in response to the coronavirus. Weakened household and business confidence also overshadow the prospects for growth. Key to recovery in the global economy will be how successfully the virus can be brought under control around the world and how long the restrictions have to be kept in place.

Both domestic demand and net exports will contract strongly in 2020. Growth in public demand will, however, somewhat moderate the contraction in the economy. At the same time the structure of the economy will change in an unfavourable direction, towards increasing dependence on public demand. The acute phase of the corona crisis will gradually pass, and the economy will begin to recover, led by private consumption. Foreign trade will not support the Finnish economy during the years covered by the forecast, as the halt in global investment caused by the corona crisis and Finland's weakening cost-competitiveness will keep the outlook for exports very subdued. Moreover, the prevailing uncertainty will continue to slow growth in consumption and investment even after the lifting of restrictions.

The corona pandemic will cause lasting damage to the Finnish economy, as not all companies will survive the deep recession and some job losses will be permanent. During the years covered by the forecast, GDP will certainly come in lower than the pre-crisis level, as the recovery from the recession will be slow. In the present recession, unemployment will decline much less than during the depression of the 1990s, but a little more than during the financial crisis of around a decade ago. The employment rate will decline around 2 percentage points in 2020–2021 and recover only partially in 2022.

Consumer price inflation will be subdued in the current year, with weakened demand due to the coronavirus and the decline in the price of crude oil having a dampening effect on inflation. The effects of the pandemic will be reflected in inflation throughout the

forecast period, but the pace of price rises will begin to be restored towards the end of the period as demand recovers. Nominal wages will rise an average of around 2% per annum in 2020–2022. Finland's cost-competitiveness will decline somewhat relative to the euro area.

The general government balance will deteriorate and public debt will grow by a record amount in a short time. This is due to the decline in tax revenues, growth in unemployment expenditures and other expenditures as well as government measures to soften the economic impacts of the lockdown. In addition, there will be a further increase in risks arising from government guarantees. The general government balance will also be weakened by the expenditure increases contained in the Government Programme, which will exceed the growth in revenues. The general government deficit relative to GDP will deepen to 8%, and public debt will rise to a full 71% in proportion to GDP in 2020. In 2022, the debt ratio will already be approaching 75%, from where it will continue to grow in the years ahead.

Table 1.

Key forecast outcomes

Percentage change on the previous year

	2019	2020 ^f	2021 ^f	2022 ^f
GDP	1.0	-6.9	3.0	2.9
Private consumption	1.0	-6.4	4.6	3.4
Public final consumption	0.9	5.5	0.1	0.1
Fixed investment	-0.8	-9.2	-1.0	4.8
Private fixed investment	-1.0	-12.4	-1.1	6.0
Public fixed investment	0.3	6.0	-0.3	0.4
Exports	7.2	-15.8	4.4	7.0
Imports	2.2	-9.4	2.4	6.8
Effect of demand components on growth				
Domestic demand	0.5	-4.2	2.3	2.9
Net exports	1.9	-2.6	0.7	0.0
Changes in inventories and statistical error	-1.4	0.0	0.1	0.0
Savings rate, households, %	0.4	6.9	3.9	2.3
Current account, %, in proportion to GDP	-0.8	-2.3	-1.9	-1.9
	2019	2020 ^f	2021 ^f	2022 ^f
Labour market				
Number of hours worked	0.8	-4.5	1.3	0.8
Number of employed	1.1	-2.8	-0.5	0.8
Unemployment rate, %	6.7	9.0	9.3	8.8
Unit labour costs	1.7	3.9	1.8	0.1
Labour compensation per employee	1.6	-0.5	5.4	2.2

Key forecast outcomes				
Productivity	-0.1	-4.2	3.5	2.1
GDP, price index	1.8	0.3	0.9	1.8
Private consumption, price index	1.1	0.2	0.8	1.4
Harmonised index of consumer prices	1.1	0.2	0.7	1.3
Excl. Energy	1.0	0.7	0.8	1.1
Energy	3.0	-6.8	-0.2	2.9
Sources: Statistics Finland and Bank of Finland.				

External environment: assumptions and financial conditions

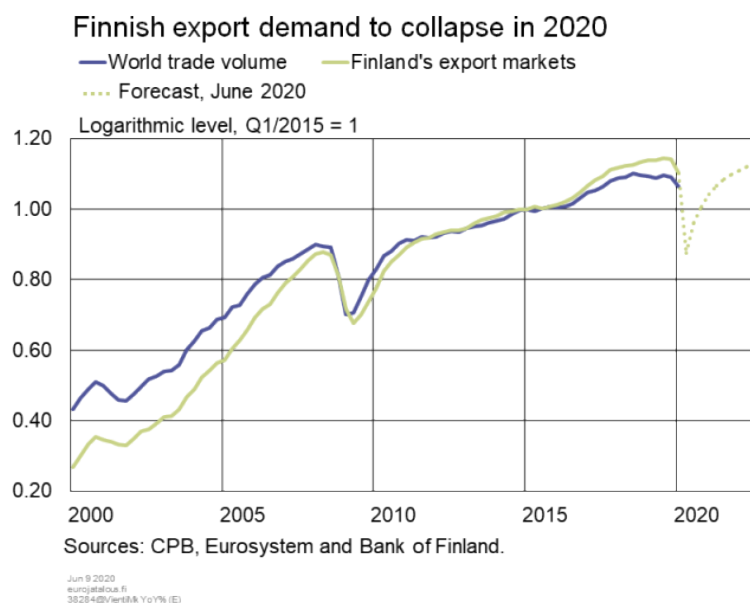
The coronavirus pandemic is causing considerable uncertainty in the growth outlook for the global and euro area economies. The global economy will enter recession in the course of 2020, with the economies of Finland's major trading partners suffering from both the direct consequences of the pandemic and the uncertainty created by the virus. The outlook for the Finnish economy is overshadowed by the weakness of the external environment. The recovery of the global economy will depend, among other things, on how successfully the virus can be contained in different parts of the world and how long the containment measures will have to remain in place. The forecast is based on data available on 25 May 2020.

Global outlook has suddenly weakened

Global economic conditions have deteriorated considerably during the spring in response to the Covid-19 outbreak developing into a global pandemic. In many countries, the measures adopted to contain the spread of the virus, together with the widespread uncertainty following in the wake of the pandemic, have weakened the operating environment of especially the service sector but also damaged global production chains and hence hampered industrial activity. The uncertainty weighs on both consumption and investment on a global scale, which will be reflected in a sharp decline in Finnish export demand this year (Chart 2). The outlook for Finland's major trading partners has also declined drastically ([Short-term economic outlook has deteriorated drastically in Finland, Sweden and Germany](#)).

Prospects for recovery in the global and euro area economies are currently shrouded in major uncertainties, given the difficulties in predicting the course of the pandemic. Some containment measures are assumed to remain in place, as a medical breakthrough, for example in the form of a vaccine, is not expected until the middle of 2021. Following the collapse witnessed in the second quarter of the year, Finland's export markets will start to revive in the second half of the year. Recovery will be slow, however, and export demand will not exceed the level of 2019 during the forecast period. The export prices of Finland's competitors will fall this year in response to the decline in global demand (Table 2).

Chart 2.



The euro area economy is projected to see a clear downturn. In the absence of a medical cure to contain the spread of the coronavirus, containment measures will have to be kept partly in place, with high uncertainty still surrounding future developments. This weighs on the euro area economic outlook, and potential output will not have been restored by the end of the forecast horizon. Euro area GDP will contract 8.7% in 2020, following a sharp decline in both domestic demand and exports. In an environment of sluggish economic activity and falling prices for commodities, notably oil, consumer price pressures in the euro area will remain subdued.

During the course of the spring, the European Central Bank (ECB) has substantially increased its monetary accommodation. It has expanded the existing asset purchase programme and from the end of March commenced purchases under the new pandemic emergency purchase programme (PEPP) launched by the ECB Governing Council, the envelope of which was enlarged to EUR 1,350 billion in June and the duration extended to mid-2021. In addition, the ECB further relaxed the conditions of the third series of targeted longer-term refinancing operations (TLTROs) and decided to launch a new series of untargeted pandemic longer-term refinancing transactions.

Interest rates remain low. The interest rate on the main refinancing operations is 0.00%, the rate on the marginal lending facility is 0.25%, and the rate on the deposit facility is

–0.50%. The ECB 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. The financial markets do not expect short-term interest rates to rise over the forecast horizon (Table 2). Continued low funding costs will contribute to the economic recovery. The recovery of the euro area economy is also important for the revival of the Finnish economy.

Chart 3.

Average interest rates on new loans have remained moderate

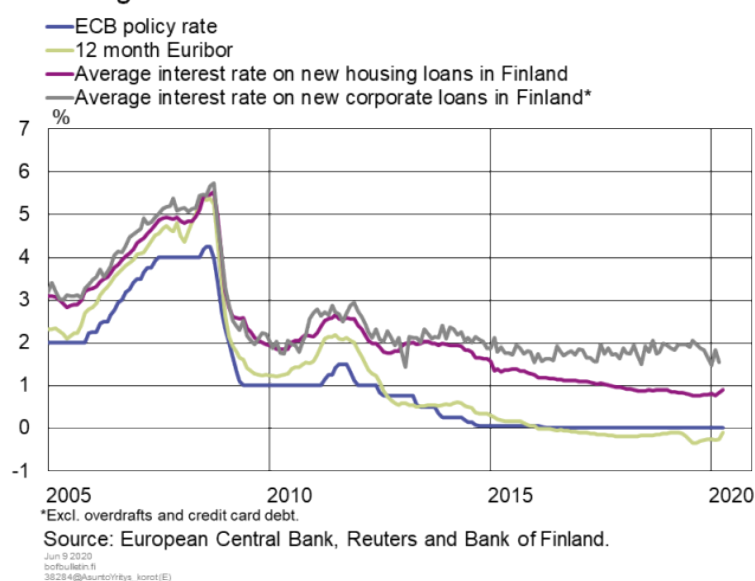


Table 2.

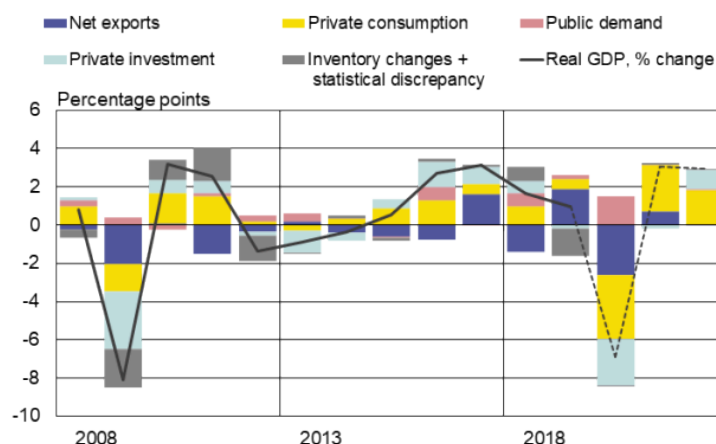
Key forecast assumptions					
	2018	2019	2020 ^f	2021 ^f	2022 ^f
Finland's export markets ¹ , annual growth (%)	3,7	1,6	-14,1	8,8	5,1
Oil price, USD/barrel	71,1	64,0	36,0	37,2	40,7
Export prices of Finland's competitors, in euro, annual growth (%)	1,4	1,6	-3,7	0,9	2,4
3 month Euribor, %	-0,3	-0,4	-0,4	-0,4	-0,4
Finland's 10-year government bond yield, %	0,7	0,1	-0,1	-0,1	0,1
Finland's nominal competitiveness indicator ²	106,8	106,3	108,0	108,4	108,4
US dollar value of one euro	1,18	1,12	1,09	1,08	1,08
¹ 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.					
² Broad nominal effective exchange rate.					
Sources: Eurosystem and Bank of Finland.					

Demand

Private consumption, private investment and net exports will contract sharply in 2020. Public consumption expenditure and investment, in turn, will grow and dampen the decline in GDP. The acute phase of the corona crisis will pass sometime next year and the economy will gradually begin to recover, led by private consumption.

Chart 4.

Economic recovery led by domestic 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 2020–2022 are forecasts.

Sources: Statistics Finland and Bank of Finland.

Jun 9 2020
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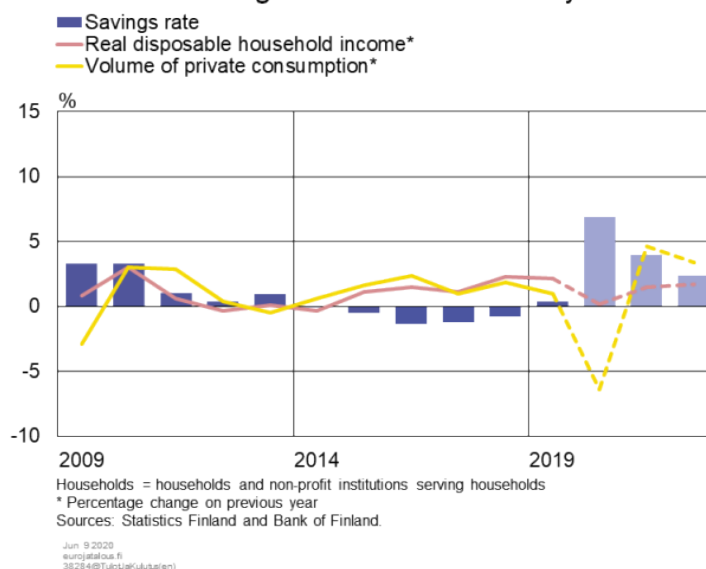
Uncertainty will dampen private consumption for a long time to come

In an environment of rapidly waning employment, the wage bill will shrink in the early part of the forecast period, especially in the current year. However, higher earnings, increasing current transfers and the persistently low level of inflation will support household purchasing power. Thus, household disposable income will remain roughly at the previous year's level in 2020 and will already grow at a fairly brisk pace in 2021 and 2022. Household real disposable income will also grow in the forecast period, at an average annual rate of slightly over 1%. In 2022, the number of persons employed will begin to rise again, lending support to growth in the wage bill and purchasing power.

The substantial weakening of the economic outlook in response to the corona pandemic is eroding consumer confidence, which in turn curbs private consumption. As business restrictions are relaxed and uncertainty abates, household consumption behaviour will gradually return towards normal. In 2020, private consumption will contract by as much as 6.4%, but will already grow by nearly 5% in 2021, after which the growth rate will moderate somewhat towards the end of the forecast period (Chart 5). Restriction measures and household fears of new infections will push up the savings rate to almost 7% in 2020. The savings rate will remain at a notably higher level than in the past few years throughout the forecast period.

Chart 5.

Household savings rate will rise noticeably



The increased uncertainty will weigh on private investment, especially at the beginning of the forecast period. With muted housing market activity, residential investment will contract by more than 5% in the current year and will resume growth only in 2022. The exceptional increase in uncertainty will lead companies to withdraw or postpone fixed investments, which will decline in the current year. The forecast assumes that a medical solution to the pandemic will be found in the first half of 2021, and uncertainty will then dissipate. This will not be reflected in investment demand until 2022, however, as there is plenty of spare production capacity in the economy due to the slow pace of economic growth.

Borrowing by companies and banks on the international financial markets has become more difficult. Risk premia on loans have risen and asset values have decreased. However, the monetary stimulus provided by the ECB has supported bank lending. In Finland, companies' financing conditions have tightened only marginally. Loan interest has not risen markedly, and access to finance has not deteriorated.

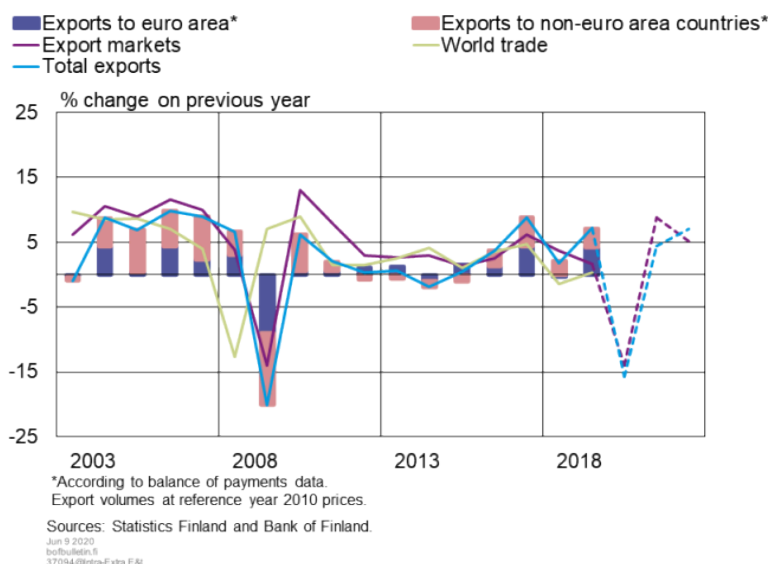
Weakness of global investment will slow recovery of Finnish exports

Demand in Finland's export markets will decline exceptionally strongly in 2020, by about 14% (Chart 6). Uncertainty will curb the global recovery for a long time to come, but the deepest recession will be short-lived, and in 2021 Finland's export markets will already grow by almost 9%. The recovery will be slow, however, and the export markets will not reach the 2019 level by the end of the forecast period. In 2020, exports will decline slightly more than export market demand, but will lag behind export market growth in 2021. Finnish exports largely consist of capital goods and intermediate products, meaning the weakness of global investments will weigh on Finnish exports over the next few years.

Imports will also contract sharply in 2020 in response to the fall in both domestic and foreign demand. The current account will remain in deficit in the immediate years ahead, at around 2% relative to GDP.

Chart 6.

Finland's export markets recovering slowly



The corona crisis will change the composition of aggregate demand markedly during the forecast period. The demand share of both private and public consumption will increase, and the shares of investments and exports will decrease compared with their GDP shares before the crisis.

Public debt will grow rapidly

The general government balance will deteriorate and public debt will grow by a record amount in a short time. This is due to the decline in tax revenues, growth in unemployment and other expenditures as well as government measures to soften the economic impacts of the coronavirus lockdown.^[1] In addition, there will be a further increase in risks arising from government guarantees. The general government balance will also be weakened by the expenditure increases contained in the Government Programme, which will exceed the growth in revenues.

The general government deficit-to-GDP ratio will deepen to 8% in 2020, but will gradually rebound to just under 4% in 2022, as the economy recovers. The general government debt-to-GDP ratio will rise to a good 71% in 2020. In 2022, the debt ratio will already approach 75% and will continue to grow thereafter. Both the deficit and the debt ratio will significantly exceed the limits set for them by the EU Treaty. However, due to the coronavirus crisis, the European Commission, supported by the Member States, has activated a clause that allows Member States to deviate from the regulatory limits in

1. The forecast for the public finances takes into account, as discretionary fiscal measures, actions agreed in the Government's first three supplementary budgets for 2020.

exceptional circumstances.

Supply and the economic cycle

The coronavirus pandemic is causing permanent losses of output for the Finnish economy. Potential growth is slowing, investment is in decline, bankruptcies are on the rise, there is a fall in the use of labour and structural unemployment is increasing. Employment is not by any means falling in the way it did during the recession of the 1990s, although the trend is worse than it was during the financial crisis.

Some job losses will be permanent

The coronavirus pandemic and the containment measures connected with it have had a rapid and dramatic effect on the labour market. The employment rate will be down by 2 percentage points over the period 2020–2021 and will only partially recover in 2022. At the end of the forecast period there will be around 65,000 fewer employed people than in 2019, and the employment rate will be roughly 71%. The unemployment rate will rise in 2021 to over 9%, and then fall slightly in 2022.

Companies have reacted to poorer sales by adjusting labour costs. Employment will fall by over 70 000 jobs in 2020. The adjustments that businesses have implemented have taken the form of a considerable number of temporary layoffs, or furloughs. The number of those on full-time furlough (as opposed to being put on short-time work) during the first few months of the crisis has risen to 160,000. The increase in unemployment has therefore remained relatively moderate for the time being.^[2] Some of those laid off will, however, drift into the unemployment category on account of the slow pace of the economic recovery. Job losses in some sectors could become long-term, as lower-than-normal demand will persist for quite some time and the number of bankruptcies will increase. Structural unemployment will begin to rise.

2. The Statistics Finland Labour Force Survey defines a person who has been laid off as employed if the layoff is for a fixed period and has lasted no more than three months. Of those laid off indefinitely, an unemployed person is one who meets the criteria for unemployment, i.e. has searched, and would be available, for work. A person laid off for a fixed period can also be classified as unemployed if the absence from work has lasted for over three months and the criteria for unemployment are fulfilled. If the criteria for unemployment are not satisfied, the person is classified as being economically inactive. For the definitions used by Statistics Finland and the Ministry of Employment and the Economy, and the differences between them, see http://tilastokeskus.fi/til/tyti/tyti_2013-08-20_men_006.html.

Chart 7.

Some of those laid off will drift into unemployment



A dramatic fall in employment was particularly noticeable in services during the first few months of the coronavirus pandemic. Although the worst is over in service industries, with containment measures being gradually lifted, the slowdown in the export sector predicted for the rest of the year will eventually have an adverse impact on employment in manufacturing. Economic uncertainty will mean fewer vacancies, and the weakening condition of the public finances may lead to recruitment in the general government sector being reduced in the longer term.

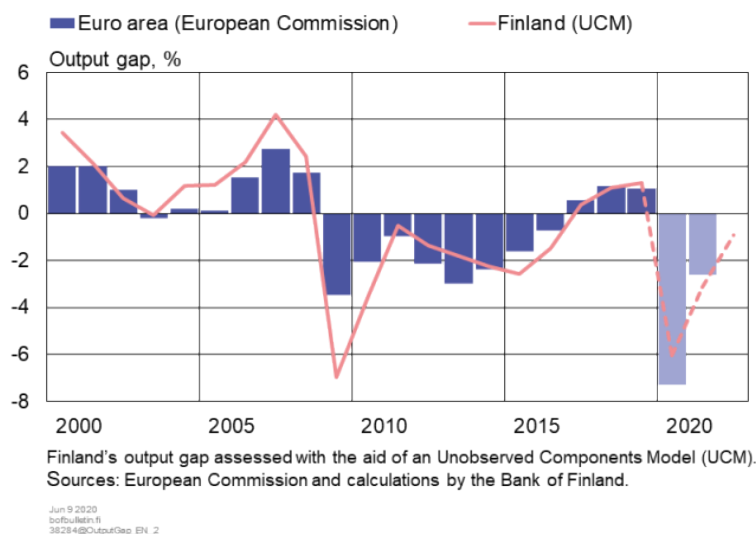
Finland will only partially recover from the deep recession

Finland is drifting towards recession from a position where the economy was balanced on the whole and GDP was growing close to its estimated potential.^[3] Because of the layoffs and redundancies due to the coronavirus pandemic and the fall in companies' capacity utilisation, the negative output gap will widen in 2020 to around 6%, and it will remain mildly negative at the end of the forecast period. The coronavirus pandemic is a symmetric shock that is also tipping the euro area economy into deep recession: Finland's output gap will be going much the same way as in the euro area overall during the forecast period. This will mean significant underutilisation of resources. During the financial crisis in Finland, the output gap was about the same as is now predicted.

3. Potential output describes the level of GDP, when all the economic production factors are normal.

Chart 8.

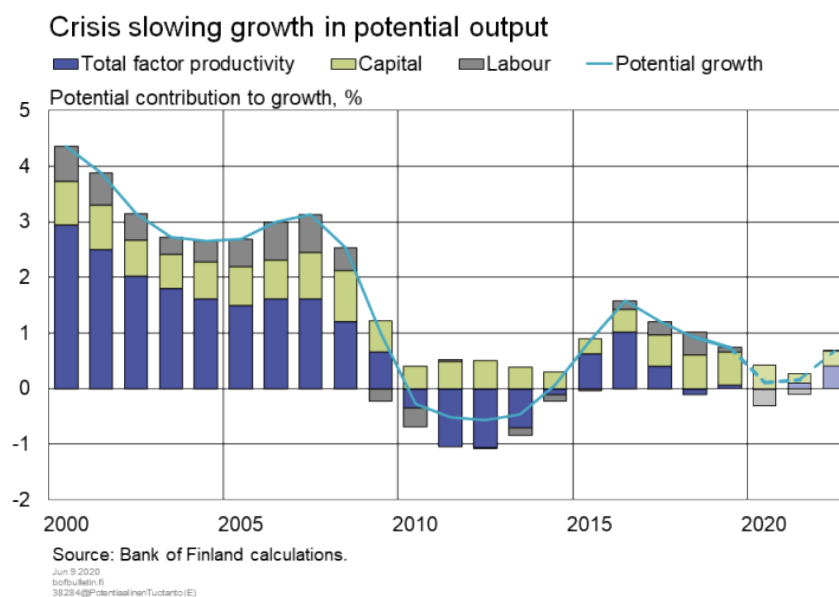
Finland and euro area in deep recession



The crisis will slow potential output growth in the years covered by the forecast. Although economic growth will pick up, after having temporarily slackened, potential output will remain lower than before. In the period 2020–2021, the decrease in investment and rise in the number of bankruptcies due to the pandemic will make any increases in the capital stock only modest and thus hamper potential output. The importance of labour input as a source of potential output will weaken, as hours worked fall and structural unemployment begins to increase. At the same time, any increase in the supply of labour will continue to be constrained by the fact that the number of people between the ages of 15 and 74 is starting to decrease. The increase in total factor productivity will remain subdued, partly on account of supply chain disruptions.

As a consequence of the coronavirus crisis, economic structures will to some extent change permanently, and there will be permanent production losses as a legacy of the pandemic. At the end of the forecast period, output will continue to be a good 1% down on 2019 levels, and around 4% below the trajectory projected before the onset of the crisis. The structural rigidities and frictions in the economy will be of great relevance to how effectively economic resources can be reallocated and how quickly potential output improves.

Chart 9.



Prices, wages and costs

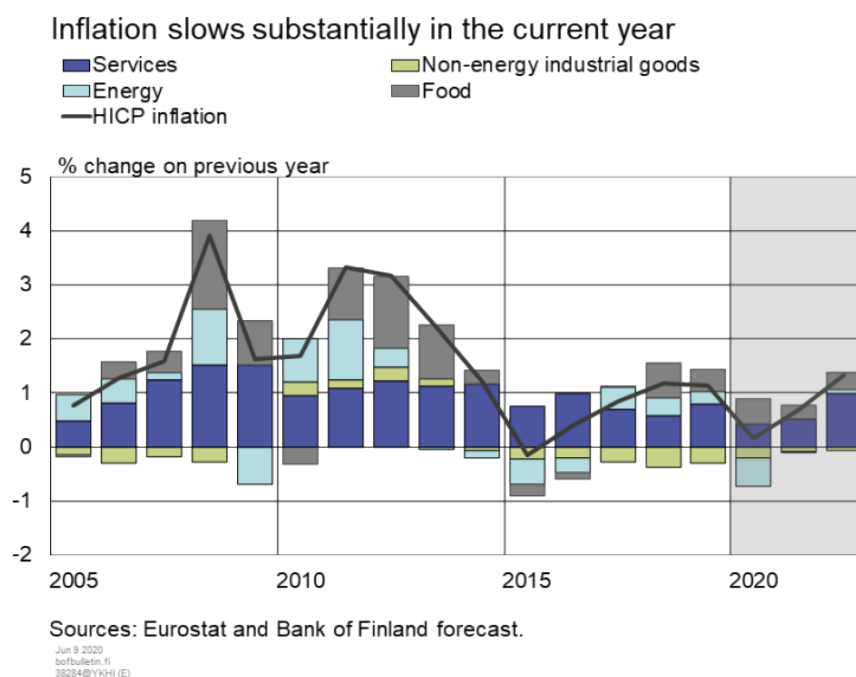
Consumer price increases will remain modest in the current year as weakened demand and falling crude oil prices due to the coronavirus pandemic slow inflation. The effects of the pandemic will be reflected in inflation over the forecast period, but prices will start to increase again at the end of the period as demand picks up. Nominal wages will rise by an average of 2% per annum in the period 2020–2022, but compensation per employee will fall slightly this year as a result of a temporary drop in employers' pension insurance contributions. If the trend in unit labour costs in the euro area is as predicted, Finland's cost-competitiveness will weaken somewhat relative to the rest of the euro area.

Rises in consumer prices remain slow

Inflation has slowed a good deal in the past few months. Whereas as recently as January the annual change in the Harmonised Index of Consumer Prices (HICP) was 1.2 %, by April inflation had slowed to –0.3%. This was the result of several factors. The sharp fall in the price of crude oil was felt in the cost of fuel and, indirectly, other commodities. The restrictions imposed on account of the coronavirus pandemic have also been reflected in consumer prices, as core inflation (HICP, excluding energy and food) stood at 0.0% in April. The pandemic will impact price trends throughout the forecast period. Furthermore, inflation expectations have clearly abated in the euro area.

With the restrictions in place, many services shut down in the spring – either that or little use was made of them – so changes have also had to be made to the way data has been collected for the consumer price index. The exceptional situation has meant that services inflation over the months to come will not necessarily fully reflect actual price pressures. In addition, the market basket has changed as a result of the restrictions, so the indices do not depict inflation as it is experienced by consumers quite so well as when things are normal.

Chart 10.



In 2020, HICP inflation will be just 0.2% (Chart 10). The fall in fuel prices will lower consumer prices substantially in the second quarter and will have an effect on prices until 2021. The uncertainty and weak demand due to the coronavirus situation will slow inflation. Core inflation will remain slow even after the restrictions are lifted as companies try to make up for fallen demand and once again try to utilise their full capacity. The prices of services will only rise by just under 1%, and those for goods (industrial products excluding energy) will actually decrease by almost 1%, so core inflation will be just 0.3% in 2020. Supply factors may, however, push up the prices of individual commodities or commodity groups. Because of production disruptions, fresh food will become more expensive in 2020, although this counts for little in the overall index.

Due to base effects, the rate of inflation will pick up slightly in the second quarter of 2021, and inflation for the year as a whole will be 0.7%. Energy prices will rise, but will generally stay somewhat lower than in 2020. Core inflation will start to normalise at the end of the forecast period as demand revives. An increase in nominal wages will bring with it rising price pressures, especially in labour-intensive services.

In 2022, inflation will accelerate to 1.3%. Energy prices will clearly contribute to this, and core inflation will accelerate to 0.9%. Despite the rise in demand, the output gap will not yet be completely closed, and price pressures will remain moderate.

Total wages and salaries dip despite rise in earnings

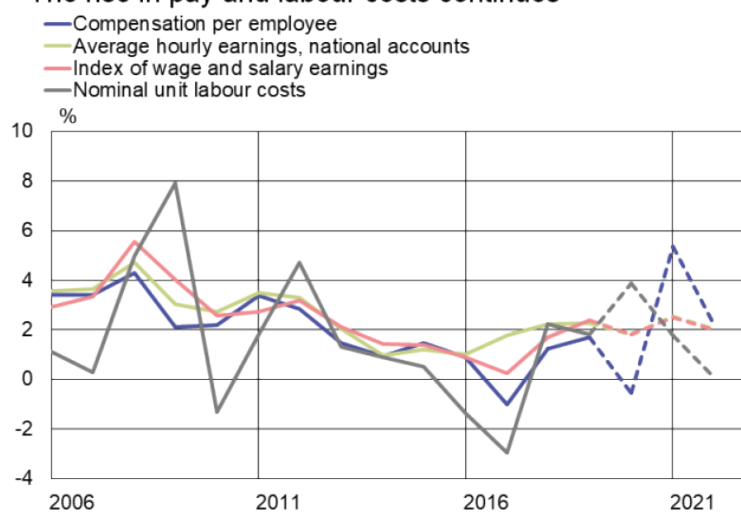
The increases in negotiated wages as a result of the round of collective bargaining conducted in winter and spring were in general slightly above 3% over the next two years. Wage drift is predicted to be less than average over the next few years, so nominal earnings measured by the index of wage and salary earnings will go up at the level of the

economy as a whole by an average of 2.1% in the period 2020 (Chart 11). The growth in real earnings of just under 2% will slow to 0.7% in 2022, when inflation accelerates.

Compensation per employee will decrease by 0.5% in 2020, due partly to a temporary reduction in employers' pension contributions, as well as layoffs. In 2021, compensation per employee will rise substantially, when reductions in employers' pension contributions are no longer an issue, but the employment rate will fall compared with the previous year. The increase in nominal unit labour costs, on the other hand, will soar to almost 4% in 2020, with labour productivity declining with the sharp contraction in production. However, the rise in unit labour costs will slow during the forecast period, ending at 0.1% in 2022.

Chart 11.

The rise in pay and labour costs continues

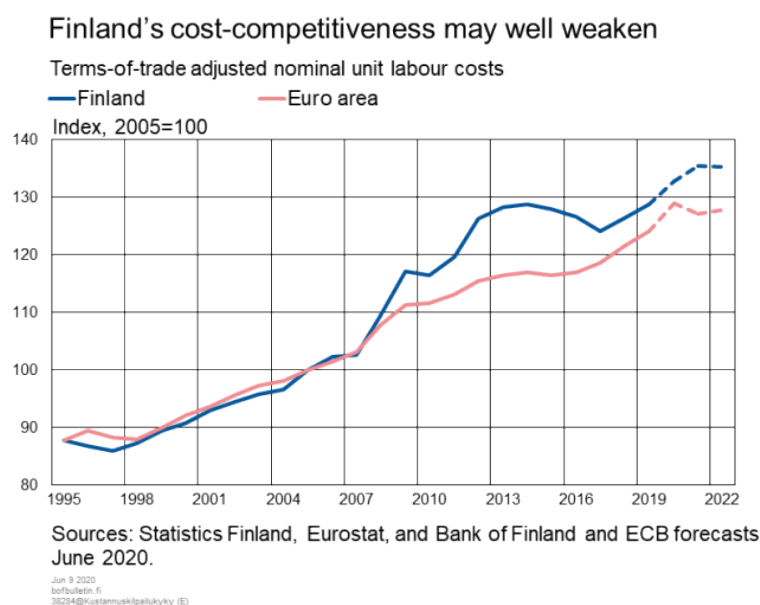


Sources: Statistics Finland and Bank of Finland.

Jun 9 2020
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The coronavirus pandemic also means that there may be changes in the way different countries manage in the area of cost-competitiveness. This is especially relevant for recovery in the wake of the crisis. If the trend in the euro area is as forecast, Finland's cost-competitiveness will weaken overall during the forecast period, when measured according to exchange-rate adjusted unit labour costs (Chart 12). In 2020, Finland's cost-competitiveness will improve relative to the euro area as a whole, but in 2021 it may well weaken. In 2021, unit labour costs in the euro area will embark on a downward trend, according to a forecast in June by the European Central Bank, while at the same time the prediction is that they will rise fast in Finland.

Chart 12.



Risk assessment

The coronavirus pandemic is causing immense uncertainty

Economic developments in the immediate years ahead will be characterised by exceptional uncertainty as a result of the coronavirus pandemic. A sharp contraction in the global economy and the demand for Finnish exports, eroded confidence among households and businesses, and containment measures on the home front will cut Finnish economic growth dramatically in 2020. The greatest uncertainty with respect to the economic outlook relates to how the economy will recover over the next few years. Key to that recovery is how fast the pandemic can be contained and the general uncertainty dispelled.

It remains unclear just how the pandemic can be contained. The fear of new infections is hurting domestic demand, especially for services. Merely easing restrictions is still not enough to restore economic activity to previous levels. Consumers may be wary of ordering services, in particular, until a medical solution is found to deal with the spread of the virus. Furthermore, there are many risks associated with trends in the export market, as imposed restrictions and uncertainty about their continuation may result in important investment for Finland being deferred long into the future. Uncertainty is putting the brakes on household spending and companies will put off investment if demand is weak and capacity utilisation is low. Moreover, countries vary as to the virulence of the virus and the robustness and timing of the restrictions they have put in place to restrain it. So the prevailing uncertain mood in the export market will continue for quite some time.

It is enormously challenging to predict how the coronavirus pandemic and the possible prolongation of restrictions resulting from it will affect economic development. The exceptional degree of uncertainty associated with any baseline forecast can, however, be

illustrated with the formulation of two alternative scenarios. What follows in Table 3 is a description of these two scenarios and the baseline forecast relating to Finnish economic development in the years to come (Table 3).

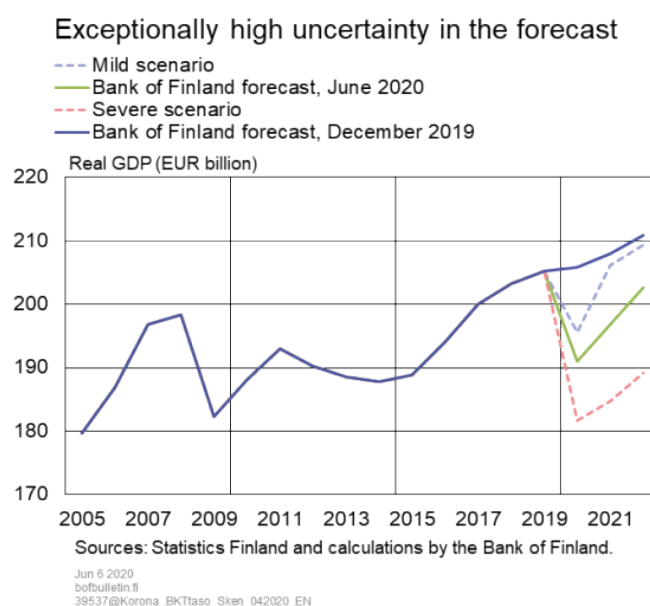
Table 3.

Description of scenarios and baseline forecast			
	<i>Mild scenario</i>	<i>Baseline forecast</i>	<i>Severe scenario</i>
<i>Assumptions on the pandemic</i>	<i>The virus is contained quickly (e.g. due to advances in medical treatment or other measures).</i>	<i>Containment of the virus is delayed and some containment measures must remain in place for a protracted period of time. No effective medical solution is found until a vaccine becomes available in mid-2021.</i>	<i>The virus is not properly contained until a vaccine is developed in mid-2021. Significant general containment measures must be continued up to this point.</i>
<i>Rate of economic recovery</i>	<i>Rapid economic recovery begins in summer 2020.</i>	<i>Economic recovery begins at a slow pace at the end of 2020.</i>	<i>The economic recession is deep and the recovery remains slower than baseline.</i>
<i>GDP in 2022</i>	<i>No significant permanent economic impact. GDP returns close to the trajectory projected before the onset of the crisis.</i>	<i>Some permanent economic impact. GDP remains below the trajectory projected before the onset of the crisis.</i>	<i>Significant permanent economic impact. GDP remains well below the trajectory projected before the onset of the crisis.</i>
<i>Inflation</i>	<i>Demand factors curb prices in the short term. No significant supply factors.</i>	<i>Temporary slowdown in inflation. Demand factors curb prices, as supply factors remain less significant.</i>	<i>Inflation slows over the longer term. Demand factors curb prices more than supply factors.</i>

The mild scenario describes a situation where the pandemic is contained reasonably fast globally, as a result, for example, of robust targeted action and medical advances. With the pandemic under control quickly and long-term, the fear of new outbreaks will obviously diminish substantially. It is assumed that containment measures will generally remain in place until the end of May 2020. In the mild scenario, there will be hardly any significant long term production losses.

The rate of economic recovery to normal levels, as described in the mild scenario, is rapid (Chart 13), and in 2022 GDP returns close to the trajectory projected before the coronavirus crisis. GDP falls by almost 5% in 2020, but picks up again in the shape of a healthy growth rate of 5% in 2021. In 2022, GDP growth slows to close to the long-term potential rate. Employment decreases sharply in 2020, but returns almost to 2019 levels by the end of the projection period (Chart 14). Containment measures temporarily cause the demand for services to fall, although it recovers fairly quickly almost to previous levels after restrictions are lifted. The export market suffers, but, as confidence grows, there is a fairly rapid recovery in investment activity. Weak aggregate demand only slows inflation in the short term (Table 4).

Chart 13.



The assumption in the Bank of Finland's baseline forecast is that it will take longer to contain the virus and that some of the containment measures will have to be kept in place longer. It is assumed that a vaccine or viable treatment will be ready in mid-2021. The uncertainty is therefore more prolonged.

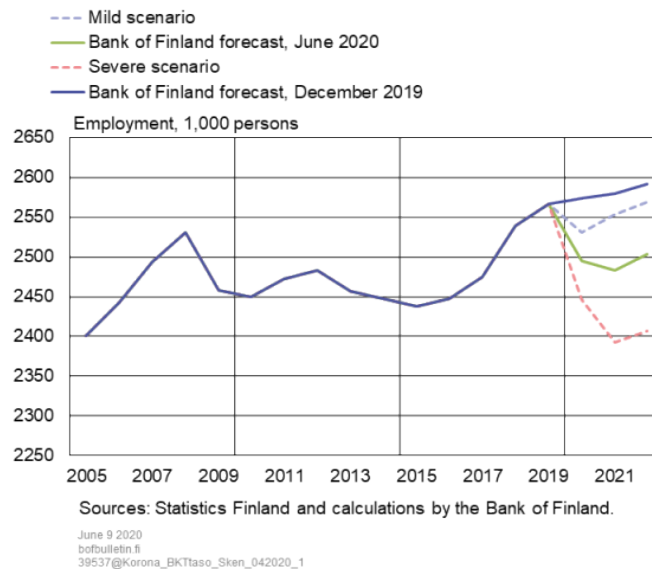
The speed of economic recovery in the baseline forecast is slower, and GDP falls more substantially than in the mild scenario. Nor does GDP return to 2019 levels, while the economy suffers permanent production losses with bankruptcies and decreased employment. The unemployment rate also remains elevated. GDP declines considerably in 2020, and economic recovery is fairly slow in 2021 and 2022. The caution that consumers exercise in order to avoid new infections and the prevailing uncertain mood in the export market dramatically cut economic growth in Finland. GDP at the end of the

projection period is at a much lower level than was predicted before the crisis. Overall, the crisis costs around EUR 35 billion in lost production in the goods and service sectors (i.e. lost GDP) during the period 2020-2022, compared with earlier forecasts. Inflation slows down long-term as weak overall demand puts a damper on price rises.

In the severe scenario, the assumption is that the virus is not properly contained in 2020, and major community containment measures have to be extended, at least to some extent, until mid-2021. Uncertainty, therefore, also remains much greater than with the mild scenario or the baseline forecast. As with the baseline forecast, it is assumed in the severe scenario that a vaccine or viable treatment will come onto the market in mid-2021.

Chart 14.

Employment contracts dramatically



In the severe scenario, economic recovery is slow and there are considerably more permanent production losses in various sectors than in the baseline forecast. A substantial number of companies go bankrupt and a large part of the rise in unemployment becomes permanent. GDP falls sharply in 2020 and only starts to pick up slightly in 2021. GDP in this scenario remains around 10% lower in 2022 than the level predicted before the onset of the crisis.

In the severe scenario, uncertainty regarding new infections cuts household consumption and firms postpone investment, as demand is weak, capacity utilisation is low and there is enormous uncertainty about the future. The unfavourable investment environment globally also weakens the chances of recovery for Finnish exports. Less investment in Finland's important export markets reduces economic growth in Finland. Weak demand means there is a slowing in the inflation rate and even temporary negative inflation in 2020.

The sharp contraction in the Finnish economy weakens the public finances considerably in all scenarios,^[4] including the baseline forecast. The weakest trend in public finances is contained in the severe scenario, where the permanent decline in production and employment levels is especially harsh. The increase in the government debt ratio from

2019 to 2022 varies between 10 and as much as 30%, depending on the scenario. In 2019, the debt-to-GDP ratio was just under 60%. The decline in employment and in private consumption mean a decrease in tax revenues, with a higher unemployment rate pushing up public expenditure. Furthermore, the measures that the government implements to soften the impact of the recession increase the deficit. There is a good deal of uncertainty in the years to come regarding the public finances and, especially, the scope and timing of adjustment measures.

It needs to be stressed that the uncertainty contained in the assessments stems particularly from the fact we do not know how the coronavirus pandemic will play out in the near future, both in Finland and elsewhere in the world. It is also uncertain as to what sort of structural changes the crisis will bring in the areas of, say, international trade, the division of labour and production. Also relevant is how the crisis will affect digitalisation and influence consumer behaviour. Furthermore, future economic developments will depend on the scale of fiscal and monetary policy measures to mitigate recession as a result of the pandemic, and how and when it is targeted in Finland and elsewhere around the world. Similarly, cost-competitiveness will be a crucial factor in how Finland emerges from the crisis.

The baseline forecast is the likeliest outcome for the economy. However, the mild and severe scenarios do not necessarily depict the best or weakest possible economic forecast: growth can also prove to be slower or faster than they suggest.

The longer the coronavirus crisis and the immense uncertainty that comes with it continue, the more long-term harm it will cause the economy, with more and more bankruptcies and unemployment. Furthermore, a delay in the revival of the export market would have a very adverse effect on the recovery of Finnish export industries. A long-term continuation of the crisis combined with a possible decline in competitiveness and rapidly worsening government indebtedness would exacerbate and prolong an economic recession over the years ahead.

4. The public finance scenarios are calculated using elasticities described in the upcoming BoF Economics Review (Jalasjoki & Kokkinen, 2020).

Table 4.

Forecast summary					
		2019	2020 ^f	2021 ^f	2022 ^f
GDP, annual growth (%)	Mild scenario	1.0	–5	5	2
	Baseline forecast	1.0	–7	3	3
	Severe scenario	1.0	–11	2	2
Employment rate (%)	Mild scenario	72.6	72	72	73
	Baseline forecast	72.6	71	70	71
	Severe scenario	72.6	69	68	68
Unemployment rate (%)	Mild scenario	7.0	8	7	7
	Baseline forecast	7.0	9	9	9
	Severe scenario	7.0	10	12	11
General government deficit, relative to GDP (%)	Mild scenario	–1.1	–6	–2	–2
	Baseline forecast	–1.1	–8	–5	–4
	Severe scenario	–1.1	–11	–8	–7
General government debt, relative to GDP (%)	Mild scenario	59.4	68	66	67
	Baseline forecast	59.4	71	73	75
	Severe scenario	59.4	78	85	90
Inflation* (%)	Mild scenario	1.1	0.4	1.0	1.5
	Baseline forecast	1.1	0.2	0.7	1.3
	Severe scenario	1.1	–0.1	0.4	1.1
Mild scenario: the economy recovers rapidly without significant and permanent output losses.					
Baseline forecast: Bank of Finland June 2020 forecast trajectory.					
Severe scenario: the economy recovers slowly and there are significant permanent					

Forecast summary

output losses.

* Harmonised index of Consumer Prices.

f = forecast

Sources: Statistics Finland and Bank of Finland.

Tags

forecast, economic outlook, economic growth, economic forecast, corona

Short-term economic outlook has deteriorated drastically in Finland, Sweden and Germany

29 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • ECONOMIC OUTLOOK



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The outlook for the world economy deteriorated in the spring as the coronavirus (COVID-19) developed into a pandemic. Significant re-strictions on movement, business and social interaction have greatly weakened growth potential, while consumption and investment are both being depressed by the uncertainty raised by the virus. Short-term indicators point to a sudden and fairly simultaneous weakening of the Finnish, Swedish and German economies in March. During May, high-frequency indicators showed early signs of picking up, but uncertainty remains high and the recovery will be slow.



This article assesses and compares the short-term economic outlook of Finland, Sweden and Germany. Sweden and Germany are Finland's main trading partners, so developments in their respective economies are of particular interest for the Finnish outlook. In addition, various restriction measures of different stringency have been introduced in Finland, Germany and Sweden to control the spread of the coronavirus.

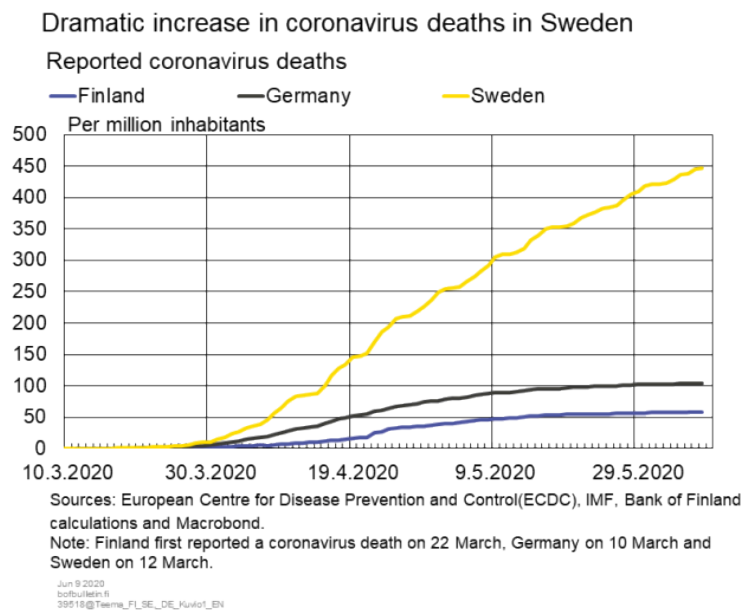
Efforts have been made by, for example, the Oxford Covid-19 Government Response Tracker to measure the stringency of restriction measures and epidemiological management measures in different countries. According to their stringency index, restrictions in Finland and Germany began to intensify at the same time as early as

January, when public information on the coronavirus was first circulated. Since late March, Germany's restriction measures have been slightly stricter than those imposed in Finland. In Sweden, on the other hand, restriction measures were only introduced at the beginning of March and have been clearly less stringent than in Germany and Finland^[1]

All three countries introduced stricter restrictions and recommendations in March. Finland adopted the powers laid down in the Emergency Powers Act in mid-March, around the same time as schools were closed and gatherings with more than ten people were banned. In Germany too, restrictions were introduced in mid-March, when schools and non-essential businesses were closed down. Later in March, Germany banned gatherings of more than two people and extended closures to further businesses, such as hairdressers.^[2] In mid-March, Swedish authorities recommended switching to remote work and avoiding travel, and in late March and early April its recommendations and restrictions were tightened further with measures such as banning gatherings with more than 50 persons.^[3]

There are also differences in the spread and severity of the epidemic. The increase in coronavirus deaths has been far more dramatic in Sweden than in Finland and Germany (Chart 1). The extent of the epidemic and the threat posed by it involve many country-specific factors, such as the population's age structure, population density and health care capacity. This may also have contributed to each country's selected virus management strategies.

Chart 1.



1. The Oxford COVID-19 Government Response Tracker and related background material can be found at <https://github.com/OxCGRT/covid-policy-tracker/>.
2. These were general restrictions introduced in all of Germany, but in some parts of the country, restriction were even stricter.
3. A more detailed list of restrictions can be found, for example, at (see appendices, Table 2) <https://www.bofbulletin.fi/en/2020/scenarios-of-the-finnish-economy-for-the-years-ahead/>.

The coronavirus affects the economy through several channels

The coronavirus has brought a large part of the world's economies to an unprecedented halt. Yet while the coronavirus pandemic is a global shock, the resulting economic losses in different countries and regions have varied.

On the one hand, restrictions imposed to combat the virus, such as restrictions on the operation of restaurants and on movement, are weakening the economic environment. On the other hand, economic activity and the consumption of services are also being dampened by the uncertainty and health fears stoked by the pandemic and, for example, the lack of knowledge about how dangerous the virus is and how easily it spreads. In addition, restrictive measures and the spread of the virus have disrupted global supply chains, thus weakening the situation in the manufacturing industry. The impact of the coronavirus pandemic on economic growth will also depend on the magnitude, targeting and timing of fiscal and monetary policies pursued in Finland and elsewhere in the world.

The relative economic impact of lockdown versus uncertainty has recently sparked much debate. In the early stages of the crisis, the OECD estimated that each month of strict lockdown would cut annual GDP growth by 2 percentage points (OECD, 2020). However, different countries have imposed different restrictions, and it has also been observed that people have voluntarily maintained social distancing. Efforts have been made to assess the impact of lockdown measures and other factors on the economy by analysing short-term economic indicators such as electricity consumption, population mobility, card payments and unemployment benefit applications.

One observation is that the economic impact is greater in areas with the most serious outbreaks. For example, European countries and US states with a particularly high rate of COVID-19 deaths per capita experience more severe economic losses than less affected areas, regardless of the restrictions in place (Chen et al. 2020). Short-term indicators measuring economic activity, such as electricity consumption, show a correlation with the stringency of mitigation policies in the early weeks of the pandemic, but no longer thereafter. At this point, the lack of economic activity has to be explained by other factors. One such contributing factor might be voluntary, self-imposed restriction measures. A wider spread of the epidemic has led to increased voluntary social distancing (Chudik et al. 2020). For example, Google searches related to fears over the virus are found to be associated with a decline in population mobility (Alfaro et al. 2020).

In the United States, mobility fell substantially in all states after the outbreak of the epidemic, even in states that did not adopt major restrictions (Gupta et al. 2020). This suggests that some of the decline in population mobility is caused by factors other than tight restrictions on movement alone. Early action and communication regarding COVID-19 appear to have played a greater role. Out of numerous indicators, announcements of the first coronavirus cases, emergency declarations and school closures reduced mobility the most.

In China and Hong Kong, it has been observed that intra-city travel was very closely linked to infections in the early stages of the epidemic. However, this correlation

weakened as the number of infections decreased over time. A rise in within-city movement no longer led to an increase in infections (Ainslie et al. 2020).

In the United States, it has also been observed that unemployment insurance claims are somewhat linked to lockdown measures, but even more so to the spread of the virus itself (Baek et al. 2020). Unemployment would have therefore increased even without the restrictions. If such is the case, lifting the restrictions will only provide limited relief to an economy buffeted by the coronavirus crisis.

The impact of the lockdown measures on household consumption in Sweden and Denmark has been studied based on transaction data from a large Nordic bank (Andersen et al. 2020). According to the estimate, aggregate spending dropped by around 25 percent in Sweden and, as a result of the shutdown, by an additional 4 percentage points in Denmark. This implies that most of the economic contraction is caused by the virus itself and occurs regardless of whether governments mandate stringent social distancing or not. Payment card data has also been used elsewhere in assessing the economic impact of the coronavirus crisis. Based on the data, it has been found, among other things, that the opportunity to make online purchases contributes to offsetting the negative impact of the lockdown on consumption (Bounie et al. 2020, Carvalho et al. 2020).

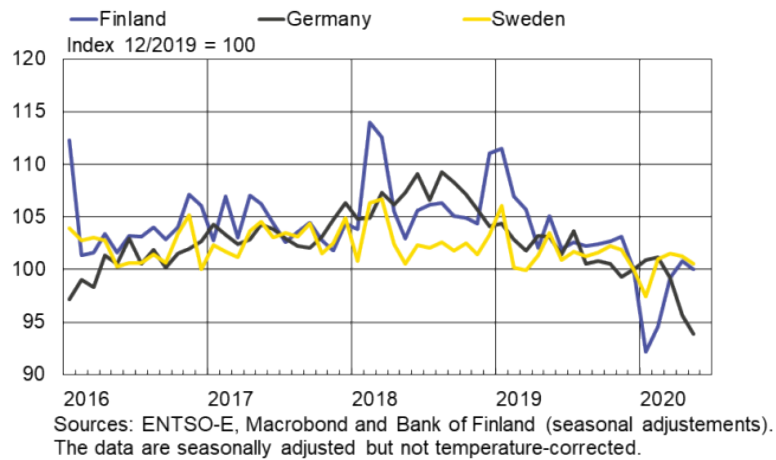
Electricity consumption declined in Germany during the spring

Since its onset in March, the coronavirus pandemic does not appear to have had a significant impact on electricity consumption in Finland or Sweden (Chart 2). This suggests that the manufacturing industry has not, at least yet, had to suspend a significant volume of its production. In Finland electricity consumption appears to have fallen sharply in the early part of the year, but according to temperature-corrected data published by Finnish Energy, a trade organisation for the energy sector, electricity consumption declined far less in January than what the raw data suggests. In addition to the exceptionally warm weather, strikes in the forest industry may have reduced electricity consumption early in the year. In Germany, on the other hand, electricity consumption decreased in April and May, which indicates a decline in economic activity.^[4] One cause may have been reduced activity in the manufacturing sector as a result of the pandemic creating supply chain problems, health concerns and lack of demand, among other issues. For example, Germany's car manufacturing was temporarily suspended in April.

4. More detailed information on German electricity consumption during the coronavirus crisis: <https://www.ifw-kiel.de/de/themendossiers/corona-krise/datenmonitor-corona-krise/>.

Chart 2.

Recent months show reduced electricity consumption primarily in Germany



The coronavirus has reduced population mobility

The consumption of services in particular relies on people being allowed and unafraid to move and meet others. Mobility data collected by Google^[5] show (Chart 3) that mobility in places defined by it as retail and recreational has decreased less in Sweden than in Finland and Germany, where restrictions have been more stringent. However, mobility began to decline simultaneously in all three countries, as early as the beginning of March. After mid-March, when restrictions were tightened in Finland and Germany, footfall in recreational and retail areas continued to drop in these countries.^{[6], [7]} The fall in population mobility in all three countries supports the conclusion put forward by Gupta et al. (2020) that part of the decline is caused by something other than strict restrictions on movement alone. Google's Community Mobility Reports data can thus be interpreted to reflect the effects of social distancing and mandatory lockdown but also voluntary restriction measures.

In Finland and Sweden especially, travel in recreational and retail areas remained at their mid-to-late March levels for a long time. These statistics did not begin to show initial signs of recovery until halfway into May. The fact that footfall in recreational and retail areas appears to have increased only slowly in Finland and Sweden, even though

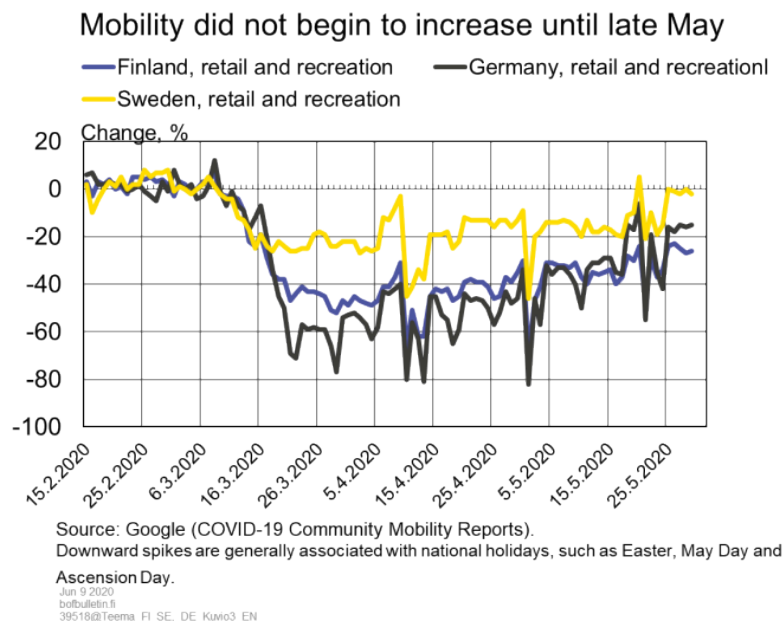
5. Source: <https://www.google.com/covid19/mobility/>. It should be noted that Google emphasises that the data is not necessarily comparable between countries due to variation in location accuracy and the understanding of categorised places.

6. In the Google mobility data, the baseline for comparing daily changes in mobility is the median value for the corresponding day of the week during the 5-week period between 3 January and 6 February 2020. The data do not take into account, e.g. seasonal fluctuations, which may distort statistics on the use of parks and public transport, in particular.

7. The report of the Finnish Competition and Consumer Authority examines mobility statistics in more detail (in Finnish): <https://www.kkv.fi/globalassets/kkv-suomi/julkaisut/muut/koronan-ja-rajoitustoimien-vaikutukset-liikkumiseen-2020.pdf>.

payment card transaction data indicate that consumption has begun to recover, may be a sign of increased online purchases as consumers seek out new ways to spend money. According to Nordea's card transaction data, online purchases with payment cards issued by Nordea increased by about 20% year-on-year in week 21. The almost 25% year-on-year increase in e-commerce sales in Germany suggests that, in Germany too, consumers have switched from brick and mortar to online stores. Thus, mobility statistics may provide an inaccurate description of economic activity or consumption if consumers have the option to switch to alternative consumption practices. Similarly, reduced physical presence at workplaces does not necessarily directly indicate a reduction in value added if remote work is possible.

Chart 3.



Payment card transaction data give indication of developments in consumption

As the coronavirus pandemic has hit consumption and services particularly hard, weekly payment card transaction data published by commercial banks has become an especially interesting short-term indicator. In Finland, for example, Nordea has published a weekly Coronavirus Barometer, which indicates that card transactions fell sharply in week 12.^[8] During Easter Week (week 15), consumption with payment cards issued by Nordea fell by almost 30% compared with Easter Week 2019. Based on payment card transactions, consumption has begun to recover after week 16, and in May, during weeks 19–21, consumption was only around 5–10% lower than earlier in 2020 and around 10–15% lower year-on-year. The weekly payment card transaction data published by Savings Bank Finland shows that at most, transactions dropped by just under 25% compared with early 2020.^[9] Data by the Savings Bank also show that, in May, payment card transactions have almost recovered to early 2020 levels. Corresponding data published

8. Source: <https://e-markets.nordea.com/api/research/attachment/113800>.

9. Source: <https://twitter.com/HennaMikkonen1/status/1263792648160186368>.

by the S-Bank also indicate that payment card transactions recovered to early year levels in euro terms, although the number of transactions was around 10% lower in week 21 than in early 2020.^[10]

In Sweden at least Swedbank has published high frequency payment card transaction data, on the basis of which Swedish consumption on Swedbank cards decreased by up to around 25% year-on-year (around mid-April). According to the latest Swedbank statistics, consumption in May has been around 10% lower than at the same time last year.^[11] Due to different reporting methods, these figures are not directly comparable with Finland. Nonetheless, it is evident that the coronavirus abruptly reduced consumption in both countries and that in both countries, consumption is also gradually recovering.

The analysis of payment card transaction data also reveals clearly that the pandemic has affected different sectors in very different ways. In Finland, the year-on-year volume of transactions with payment cards issued by Nordea in week 21 dropped by around 90% in the hotel industry and by nearly 70% in the restaurant industry. In Sweden, the volume of Swedbank payment card transactions in hotels and restaurants was around 40% lower in week 21 than the year before, i.e. these statistics suggest that the decrease in these sectors was slightly smaller than in Finland.^[12]

While the payment card transaction data of individual commercial banks cover only a part of aggregate consumption, they provide important high frequency information on the development of consumer spending. A more comprehensive picture of consumption can be obtained by examining, for example, retail trade directly. However, figures on retail turnover have only been published for April.

In March, retail trade turnover decreased by just under 3% in Finland, by around 2% in Sweden and by around 4% in Germany compared with the previous month, but remained almost unchanged compared with March 2019 (Chart 4). In April, retail trade continued to contract sharply in Germany: turnover decreased by around 5% compared with both the previous month and the previous year. In Finland and Sweden, retail trade turnover remained largely unchanged in April compared to March. However, the sectoral differences are considerable. In Germany, for example, April figures for trade in textiles, clothing and shoes are estimated to have decreased by about 70% year-on-year.

In addition to its impact on retail trade, the pandemic affects the consumption of durables. For instance, first registrations of passenger cars decreased by almost 40% in both Finland and Sweden in April, but by over 60% in Germany. In May, the number of first registrations decreased by about 50% year-on-year in all three countries.

The services sector has seen turnover plummet in accommodation and restaurant activities. In March, turnover decreased at an annual rate of about 30% in Sweden, 35% in Finland and 45% in Germany (Chart 5). In April, the decline will probably have been

10. Source: <https://dokumentit.s-pankki.fi/tiedostot/s-pankin-korttitilastot-toukokuu-2020>.

11. Source: <https://research.swedbank.se/default.aspx?cdguid=A8C852A9-B3AC-4036-BE75-CA092591F193>.

12. As the percentages used in the text have been approximated on the basis of figures published by commercial banks, inaccuracies may occur.

even greater. Germany, for example, has only allowed overnight stays related to business trips. Tourist overnight stays fell in March at an annual rate of 47% in Finland, 53% in Germany and 38% in Sweden. According to preliminary data, overnight stays in Finland fell by 88% in April. Service sector activity has thus slowed dramatically in all three countries, generally speaking most in Germany and least in Sweden.

Chart 4.

Retail trade turnover has declined especially in Germany

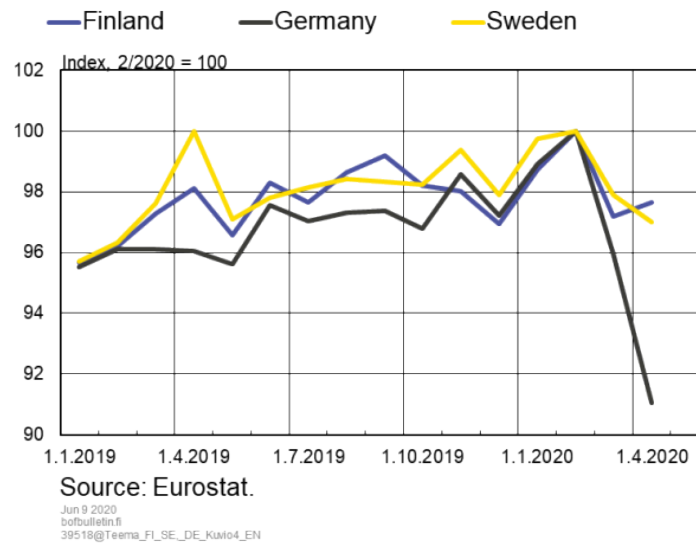
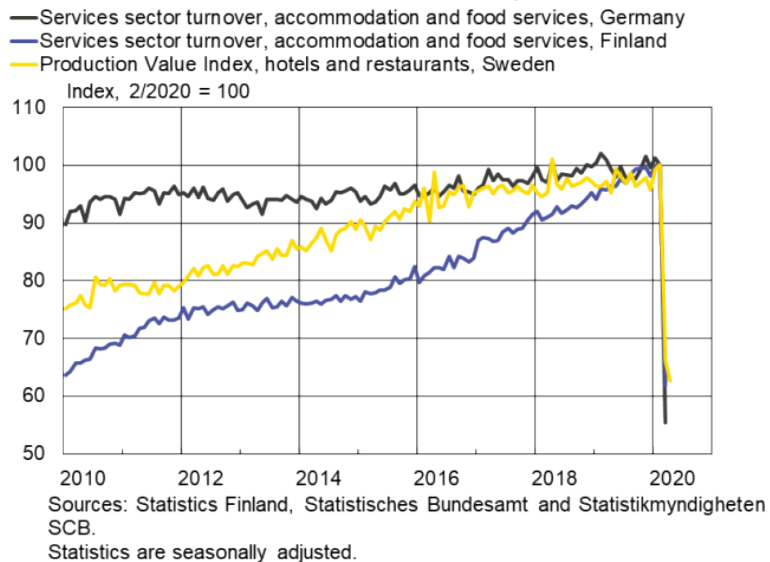


Chart 5.

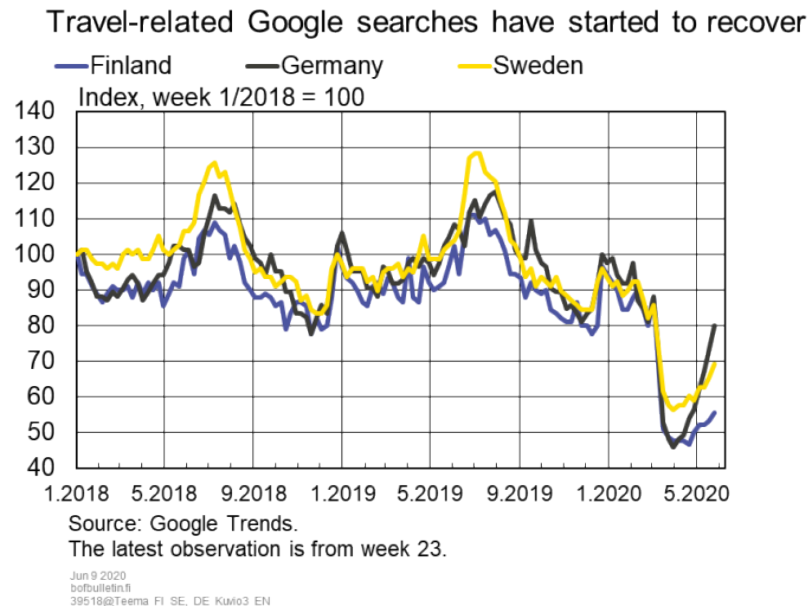
Turnover in accommodation and restaurant services plummeted in March



Similar developments in card payments and retail trade in Finland and Sweden support the conclusions of Andersen et al. (2020), who compared Denmark and Sweden and found that most of the reduction in economic activity is caused by the virus itself and not by government restrictions. Based on card payment statistics, consumption can be

expected to gradually recover in May, but the differences between sectors will remain large. At the same time, Google searches related to tourism have trended up in recent weeks, especially in Germany, but also in Finland and Sweden (Chart 6), and are indicative of a gradually returning interest in travel. In any case, the persistent uncertainty caused by the pandemic is likely to weigh on consumption for a long time to come.

Chart 6.

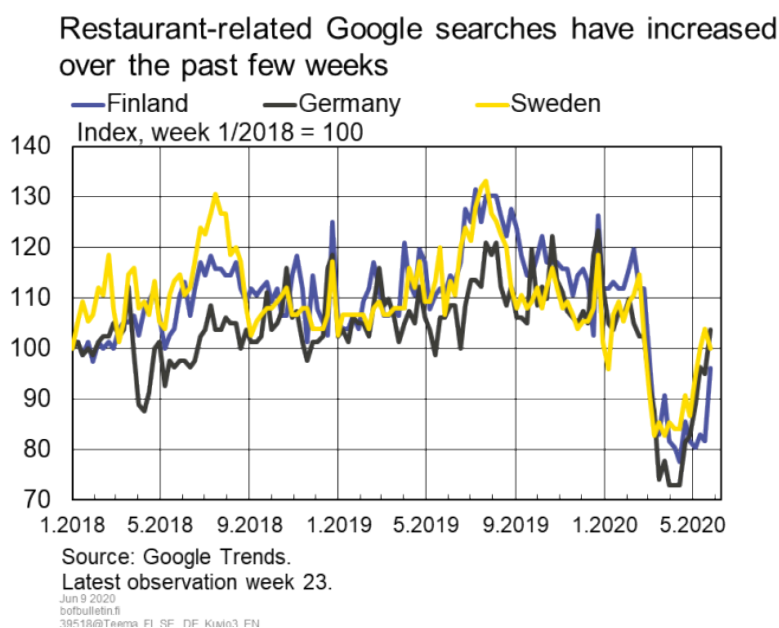


Google searches can also be used more generally when trying to assess how much activity has slowed in different countries.^[13] For example, weekly Google searches related to restaurants decreased simultaneously in all three countries as early as the beginning of March (Chart 7). After a sharp decline, there has been a clear upswing in searches in the last couple of weeks, particularly in Sweden and Germany. At the same time, the coronavirus situation has eased, and governments have begun to lift restrictions. In Finland, the reopening of restaurants at the beginning of June boosted restaurant-related Google searches markedly.

To sum up, Google searches tell a similar story as data on population mobility and card payments: activity contracted sharply in March in all three countries; but the most in Germany and the least in Sweden. In recent weeks, activity seems to have picked up cautiously in all three countries.

13. It should be noted that the statistics are subject to a considerable degree of uncertainty as to, for example, what kinds of searches are made in different countries, and for what purposes.

Chart 7.



Labour markets have deteriorated sharply

The coronavirus pandemic has been rapidly reflected in labour markets, as the crisis has hit the labour-intensive services sector exceptionally hard. The challenge in comparing labour market indicators is that countries have, for example, disparate practices in categorising who is registered as unemployed, differing lay-off systems and different possibilities to adjust the price of labour. This means that short-term labour market effects may not be properly reflected e.g. in the labour force survey, which is in any event published with a lag. Indicators that react more rapidly are, for example, various statistics on short-time work or lay-offs. These statistics are not directly comparable between countries, however.

On the whole, it is clear that the labour market situation has deteriorated dramatically in all countries. The number of furloughed employees has increased significantly in Finland since mid-March. According to an estimate by the Ministry of Economic Affairs and Employment (MEAE)^[14], the number of furlough and unemployment periods caused by the pandemic is 224,000 and 21,000, respectively, which in total accounts for about 9% of the Finnish labour force.^[15] During the spring, Sweden has introduced a system of short-time work (“korttidsarbete”), under which employers can shorten employees’ working hours and obtain financial support for labour costs.^[16] At the end of May,

14. In its calculations, the MEAE uses a time series model to estimate the normal number of lay-off and unemployment periods commenced. The figures were obtained from the MEAE website on 1 June 2020.

15. The calculation does not take into account the fact that the same person may have had several periods of furloughs and that some of the furlough periods have already ended, meaning the percentage relative to the labour force is only indicative. At the end of April the number of employees on furlough totalled 164,000. The MEAE statistics only cover persons that are furloughed full-time and have registered as unemployed jobseekers. Therefore, a share of all persons furloughed due to the pandemic are excluded from the statistics.

16. More information on the Swedish system and the source of the statistics: <https://tillvaxtverket.se/om-tillvaxtverket/information-och-stod-kring-coronakrisen/statistik-om-korttidsarbete.html>.

approved applications within this scheme covered over 500,000 employees, or nearly 10% of the workforce. In addition, in March and April the number of newly registered unemployed jobseekers amounted to almost 2% of the workforce, and more than one per cent of the workforce had been warned of the risk of redundancy.

According to the German Federal Employment Agency (BA), in March–April, German companies had registered 10.66 million employees for short-time work (“Kurzarbeit”), which accounts for about 25% of the workforce.^[17] The actual figures reveal that 2.02 million employees were in fact working shortened hours in March. The Agency estimates that around 6 million employees, or about 14% of the workforce, could have ended up working on a short-time basis by the end of April. The IFO Institute’s estimate puts the number of short-time workers in May at 7.3 million. During the financial crisis, the monthly peak in the number of employees on short-time work in Germany – 1.44 million – occurred in May 2009. The comparison with the current situation highlights the suddenness of the labour market deterioration as a result of the pandemic.

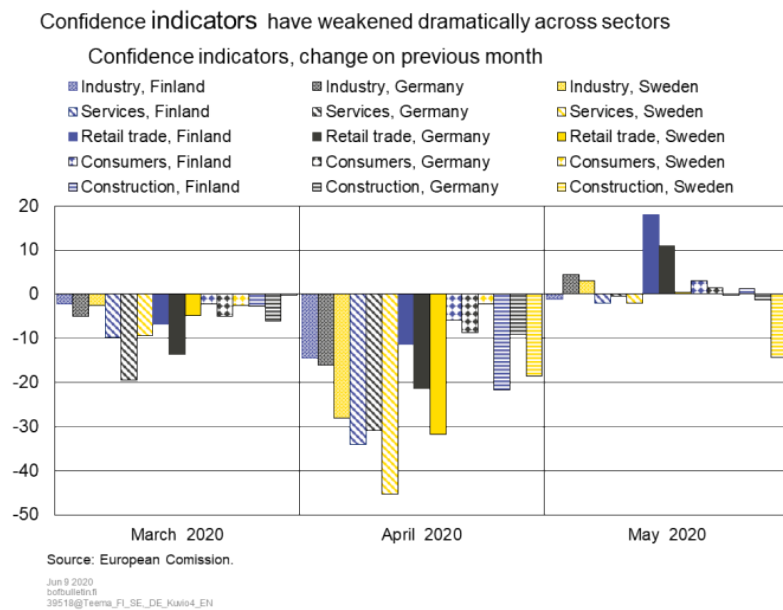
Even though the statistics on short-time work are not directly comparable between countries, they nevertheless point to a substantial deterioration of the labour market in all three countries. An abrupt weakening of the labour market leads to a significant increase in economic uncertainty and may boost saving, if households reduce or postpone consumption.

Confidence indicators display a dramatic increase in uncertainty

Confidence indicators of various economic agents offer a way of assessing near-future developments in different sectors of the economy. Confidence indices also reflect the overall sentiment of society, which, among other factors, is influenced by the coronavirus restrictions and fear of the spread of the virus. In March, confidence surveys were mainly conducted in the first half of the month, before the tightening of restrictions and the marked increase in concern surrounding the coronavirus. In March, confidence weakened most in Germany and mainly in services and retail trade (Chart 8). In April, confidence indicators fell on a broader front, as expected, and still notably steeply in the services and retail trade sectors, whose business activities are the most affected by coronavirus restrictions and the spread of the virus. Consumer confidence, in turn, has so far declined relatively moderately. In April, confidence declined particularly sharply in Sweden, which reinforces the notion that uncertainty and caution are major factors contributing to the deterioration of economic activity. In May, overall sentiment did not become gloomier, and confidence in the retail sector was even seen to improve in Finland and in Germany. The German Purchasing Managers’ Indices indicate that activity contracted in May, but to a lesser extent than in the previous month. Thus, confidence indicators support the view garnered from data on mobility, card payments and Google searches, namely that activity has shown early signs of recovery in May.

17. The figure indicates the total number of employees covered by Kurzarbeit notifications. Companies may have filed a notification as a precautionary measure, so the actual figure may turn out to be smaller.

Chart 8.



Bleak outlook for the current year

The abrupt deterioration of the economic environment is also reflected in the forecasts for 2020 as well as in nowcasting models and short-term indicators gauging the current economic situation. According to the Bank of Finland's most recent forecast, the Finnish economy will contract by about 7% and the unemployment rate will rise to around 9% in 2020. Uncertainty is high, however, and according to the forecast's [risk assessment](#), GDP will shrink by 5–11% in the current year. The unemployment rate is estimated to range between 8% and 10%. In Sweden, according to the Riksbank's most recent forecast published at the end of April, the economy will contract by 7–10% and unemployment will rise to 10–11% in 2020.^[18] The forecast published by Konjunkturinstitutet at the end of April is in line with the Riksbank's projections (GDP -7 %; unemployment rate 10.2%).^[19] In Germany, the Bundesbank has begun to publish a new weekly activity index (WAI) for the German economy, according to which German GDP shrunk by 1.9% in the first quarter of 2020.^[20] This is fairly close to the actual economic contraction of 2.2%. At the beginning of June, the WAI suggested that activity over the past 12 weeks was 5.75% weaker than in the preceding 12 weeks. The Bundesbank's most recent forecast projects a contraction of 7% for the German economy in 2020.^[21]

The European Commission published its spring forecast at the beginning of May. The

18. More information on the forecast: <https://www.riksbank.se/sv/penningpolitik/penningpolitisk-rapport/2020/penningpolitisk-rapport-april-20202/>.

19. More information on the forecast: <https://www.konj.se/english/publications/swedish-economy-report/swedish-economy/2020-05-04-updated-economic-outlook.html>.

20. More information on the Bundesbank activity indicator: <https://www.bundesbank.de/en/statistics/economic-activity-and-prices/weekly-activity-index>.

21. More information on the forecast: <https://www.bundesbank.de/en/press/press-releases/bundesbank-projections-german-economy-will-recover-after-deep-recession-834296>.

Commission estimates that the economic contraction in 2020 is 6.3% in Finland, 6.1% in Sweden and 6.5% in Germany.^[22] The economic outlook for the current year is therefore estimated to be weak but very similar in all three countries.

The coronavirus pandemic weighs on growth prospects

The current state of the economy and the outlook for the near future can be assessed by comparing indicators that are available with a short publication lag. In addition to the diverging strategies for combatting the coronavirus, countries differ e.g. in terms of their economy's starting position and structure going into the crisis as well as their crisis management measures. Differences in economic developments may therefore result from a number of factors. On the other hand, the uncertainty caused by the virus is, at least in principle, similar in all countries.

Short-term indicators paint a gloomy picture for growth prospects especially in the second quarter of 2020 – in Finland, Germany and Sweden alike. A number of indicators suggest that the contraction in Sweden would be slightly smaller than in Finland and notably smaller than in Germany, but the difference is moderate. The recommendations-based strategy in Sweden has not protected the country's economy, at least in the short term, from a sharp deterioration in the services sector. The labour market has weakened abruptly and confidence indicators have fallen as sharply in Sweden as in Finland and Germany. Growth forecasts for 2020 as a whole are also similar in all three countries. Based on these observations, it cannot be concluded that the potentially slightly smaller decline in the Swedish economy compared with the other two economies would result from the absence of stringent restriction measures. As a small open economy, Sweden is also dependent on the developments in the rest of the world. As Finland and Germany have lifted their restrictions, the gap in the restrictive impact of their coronavirus containment measures has also narrowed in May. The economic situation in Finland's main trade partners is weak, which is likely to be reflected as subdued export demand this year. However, it should also be noted that, over the course of May, many high-frequency indicators have shown early signs of a pick-up in activity in all three countries.

It is worth noting that developments in Finland, Sweden and Germany have been very similar and simultaneous. This highlights the global nature of the pandemic and reinforces the perception that the uncertainty caused by the pandemic in itself has a major impact on economic activity. The lifting of restrictions alone will not necessarily be enough to restore the normal functioning of the economy. Confidence must also recover. Uncertainty in itself plays a major role, especially when there is a risk of a virus threatening people's lives. Uncertainty may therefore curb the recovery of consumption and investment well after the lifting of restrictions. Households may postpone larger purchases in response to the weak labour market and economic situation, and companies in turn may postpone investment due to uncertain demand and vulnerable supply chains.

22. More information on the forecast: https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2020-economic-forecast-deep-and-uneven-recession-uncertain-recovery_en.

References

- Ainslie, K. E. C. – Walters, C. E. – Fu, H. et al. (2020) Evidence of initial success for China exiting COVID-19 social distancing policy after achieving containment. Wellcome Open Res 2020, 5:81 (<https://doi.org/10.12688/wellcomeopenres.15843.1>)
- Alfaro, L. – Faia, E. – Lamersdorf, E. – Saidi, F. (2020) Social Interactions in Pandemics: Fear, Altruism, and Reciprocity. NBER Working Paper No. 27134, May 2020.
- Andersen, A. L. – Hansen, E. T. – Johannesen, N. – Sheridan, A. (2020) Pandemic, Shutdown and Consumer Spending: Lessons from Scandinavian Policy Responses to COVID-19. Preprint, May 12, 2020.
- Baek, C. – McCrory, P. – Messer, T. – Mui, P. (2020) Unemployment effects of stay-at-home orders: Evidence from high-frequency claims data. IRLE Working Paper No. 101-20.
- Bounie, D. – Camara, Y. – Galbraith, J. W. (2020) Consumers' mobility, expenditure and online- offline Substitution response to COVID-19: Evidence from French transaction data. Available at SSRN.
- Carvalho, V. S. – Hansen, A. – Ortiz, J. R. – García, T. – Rodrigo, J. V. – Rodríguez, Mora – Ruiz, P. (2020) Tracking the covid-19 crisis with high-resolution transaction data. CEPR Discussion Paper, 14642.
- Chen, S. – Igan, D. – Pierri, N. – Presbitero, A. F. (2020) Tracking the Economic Impact of COVID-19 and Mitigation Policies in Europe and the United States. IMF Special Series on COVID-19.
- Chudik, A. – Pesaran, M. H. – Rebucci, A. (2020) Voluntary and Mandatory Social Distancing: Evidence on COVID-19 Exposure Rates from Chinese Provinces and Selected Countries. NBER Working Paper No. 27039.
- Gupta, S. – Nguyen, T. – Rojas, F. L. – Raman, S. – Lee, B. – Bento, A. – Simon, K. – Wing, C. (2020) Tracking Public and Private Responses to the COVID-19 Epidemic: Evidence from State and Local Government Actions. NBER Working Paper No. 27027.
- OECD (2020) Evaluating the initial impact of COVID-19 containment measures on economic activity. OECD Policy Responses to Coronavirus (Covid-19).

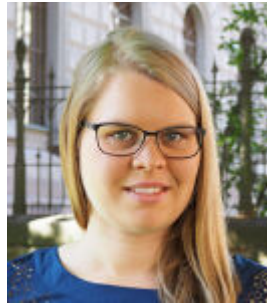
Tags

[short-term indicators](#), [economic outlook](#), [coronavirus](#), [corona](#)

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Companies respond to the corona crisis by adjusting labour costs

29 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • ECONOMIC OUTLOOK



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The corona pandemic and the related lockdown measures have led to a strong contraction in business turnover and weakening of profitability, particularly in the service industries. If the profitability crisis persists, it will turn into a liquidity crisis and the risk of corporate bankruptcies will increase. Companies can, to some extent, adjust to the decline in turnover by cutting costs, for example by decreasing purchase volumes and by negotiating reductions to other cost items, such as rents. With the help of temporary lay-offs, companies can even adjust staff expenditure rapidly, if necessary.



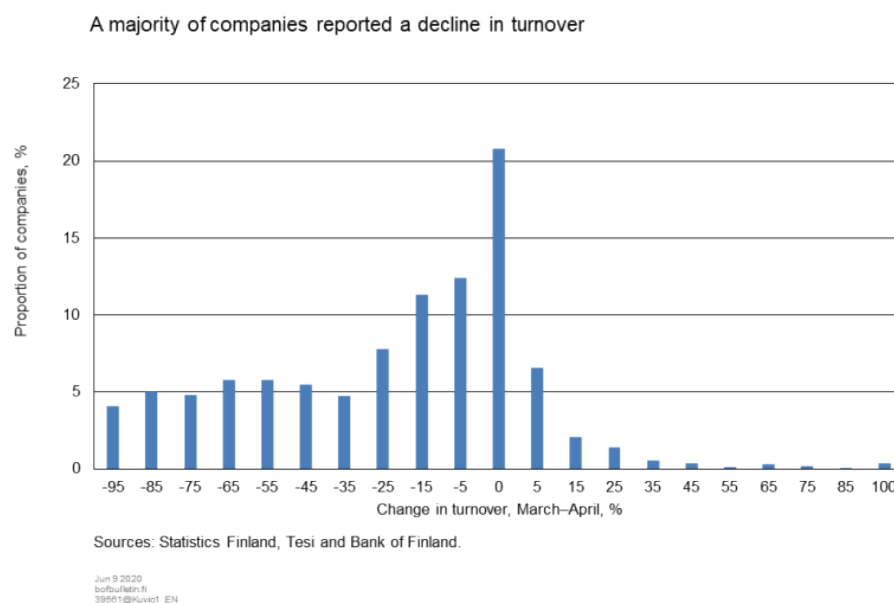
Many companies experienced a sharp contraction in turnover during the corona crisis, particularly in its early phases. If companies are unable to adjust their cost structures accordingly, their profitability will weaken and cash flow may turn negative. Rapid adjustments in labour costs play a significant role in companies' recovery from a sharp contraction in business volumes as experienced during the corona crisis. This article examines the significance of labour cost adjustments in the recovery of Finnish companies from the corona crisis.

This examination is based on data from Tesi (Finnish Industry Investment), which combines the results of a survey of some 1,600 SMEs, conducted in the period 3 April–5 May 2020, with business financial accounts data.^[1]

One-third of companies reported an over 30% decline in turnover

A large share of the companies that participated in the survey reported a decrease in turnover in March–April 2020. The results of the survey show that for 36% of the companies, turnover declined by more than 30% (Chart 1). Over 10% of the companies reported an increase in turnover, and slightly over 20% experienced no changes.

Chart 1.



Business survey and financial accounts data enable a mechanical assessment of the proportion of companies that are threatened by a drying up of cash assets in the coming months, following the collapse in turnover. In the calculation, the largest expense items were deducted from the turnover, which shows the company's operating margin. If a company's turnover declines without a corresponding decrease in costs, its operating margin will fall or turn negative. In the short term, the company can use its cash assets for covering losses, but as the cash assets dry up, the company will face liquidity problems. Companies facing liquidity problems have a very high risk of going bankrupt if they are unable to obtain additional funding. For March–April, the assumptions on turnover used in the calculation are based on companies' own estimates. Some of the lockdown measures on businesses were lifted in June, and as a result, companies' turnover is assumed to gradually return to normal. Due to the unavailability of company-level estimates on developments in turnover after April, the calculation assumes that, starting in May, the companies' operating profit will remain at the level of April until the

1. In the survey by Finnish Industry Investment, companies were asked about the effects of the coronavirus pandemic on changes in turnover and profitability, as well as about cost adjustments after the onset of the crisis. The survey data combines companies' financial accounts data for the years 2017 and 2018 from the Orbis database. Following some delimitations, the data consists of 1,414 companies from the eight main industries: manufacturing; construction; wholesale and retail trade; transportation and storage; accommodation and food service activities; information and communication; professional, scientific and technical activities; and administrative activities.

end of each review period (3 months/6 months). This assumption probably underestimates the developments in companies' turnover and liquidity position since May. This assumption is also gloomier than, for example, the assumption in the baseline scenario of the [Bank of Finland's June 2020 forecast](#). This assumption was chosen because of the unavailability of company or even industry-level estimates of developments in turnover since the end of April. In addition to monthly cash flow, the calculation takes into account the amount of liquid assets at the beginning of the review period.^[2] The estimate of the amount of liquid assets is based on financial accounts data for 2018.

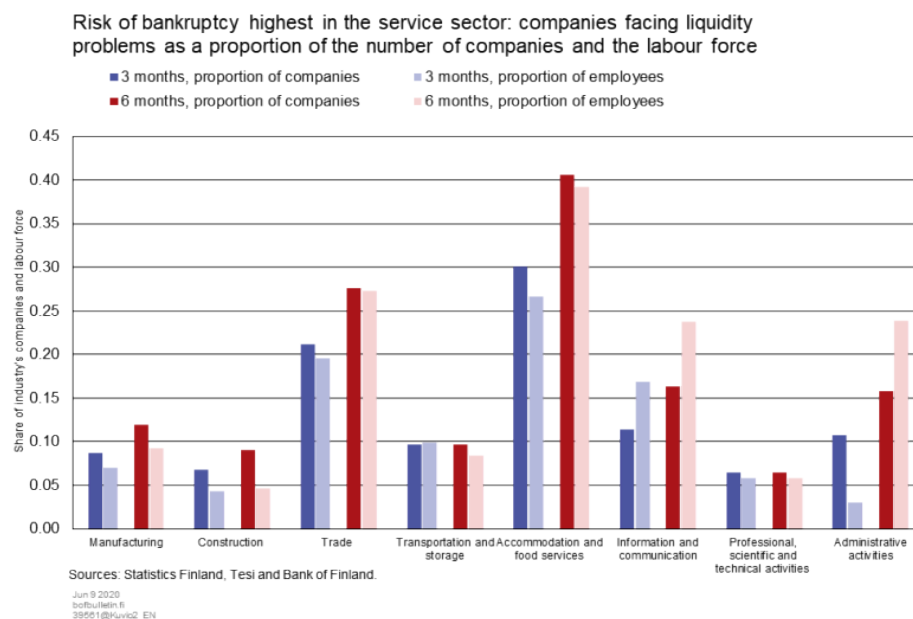
According to the calculation, in three months after the onset of the corona crisis, i.e. at the end of May 2020, a total of 12% of the sample companies were facing liquidity problems. Liquid assets create a buffer that enables a company to continue even unprofitable business operations for some time, but not endlessly. As the time horizon of the review period extends, the proportion of companies facing liquidity problems thus increases significantly. Based on the calculation, in six months after the onset of the crisis, i.e. at the end of August, as many as 16% of the companies would have liquidity problems if the crisis had continued and the lockdown measures had not been lifted.

The persons employed by companies that will face liquidity problems already in three months account for some 8% of the persons employed in the sample, and the persons employed by companies that would have liquidity problems in 6 months account for some 16% of the persons employed in the sample. Thus, after three months, the majority of liquidity problems are found in smaller-than-average companies, but after six months, this difference is no longer observed. One possible interpretation is that larger companies are able to avoid a cash crisis for a longer period of time, but only for a couple of months longer.

The proportion of companies facing liquidity problems differs considerably between industries. The highest proportion of companies with liquidity problems is found in service industries where demand has collapsed, reflecting both the lockdown measures and the weakening of consumer confidence.

2. A company's cash position in n months is calculated as follows: cash position in n months = company's liquid assets at the starting point, based on financial accounts data + operating profit in March + (n-1)*(operating profit in April).

Chart 2.



Companies respond to changes in turnover

Companies may respond to a decline in turnover by adjusting their costs. Labour costs are a significant cost item for the whole Finnish corporate sector. In manufacturing, labour costs account for some 15% of a company's total production costs, and in other industries their share is about 30%.^[3]

Companies can reduce labour costs by introducing temporary lay-offs, redundancies or shorter working hours. The decrease in labour costs during the corona pandemic is also due to the cuts in employers' social security contributions introduced by the government. In 2020, these contributions are reduced by over EUR 1 billion to alleviate the situation in the corporate sector. Companies' own tools for lowering labour costs have in practice turned out to be limited, which highlights the importance of the lay-off system.

Cuts in labour costs by the companies in the survey sample clearly reflect the changes in turnover. In Chart 3, companies are divided into categories based on changes in turnover in March–April. The chart on the left shows the proportion of companies in each category that have adjusted labour costs. The chart on the right, in turn, shows the average size of the adjustments in each category. The larger the decline in turnover, the larger the share of companies in the industry that have adjusted their labour costs (Chart 3). The chart on the right shows labour cost adjustments relative to changes in turnover. Adjustments have usually been larger, the larger the decline in turnover.

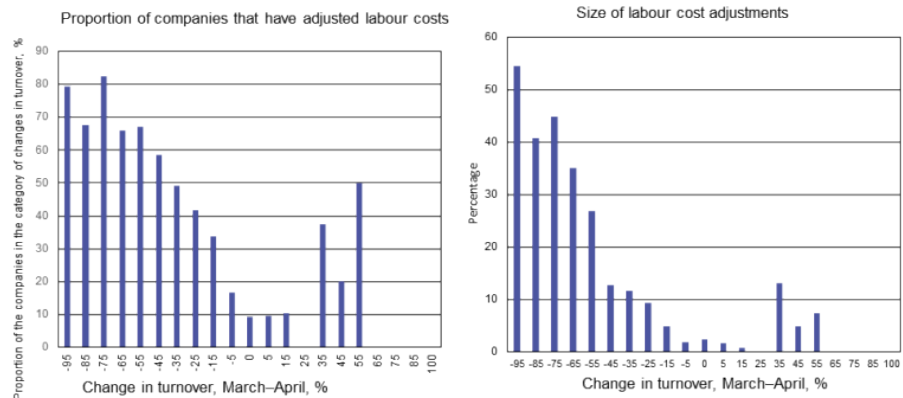
Chart 3 shows that, for some companies, the downward adjustments in labour costs have been quite strong, while at the same time, their turnover has increased substantially. The proportion of companies that have experienced a strong increase in turnover is, however,

3. Silvo, A. (2019), [Palkkojen nousun vaikutus kokonaiskustannuksiin eri toimialoilla](#). Bank of Finland Bulletin, Economic outlook, 17 May 2019.

very small. In the categories +35%–+55%, there are only a handful of companies.

Chart 3.

Companies have adjusted labour costs based on changes in turnover



Sources: Statistics Finland, Tesi and Bank of Finland.

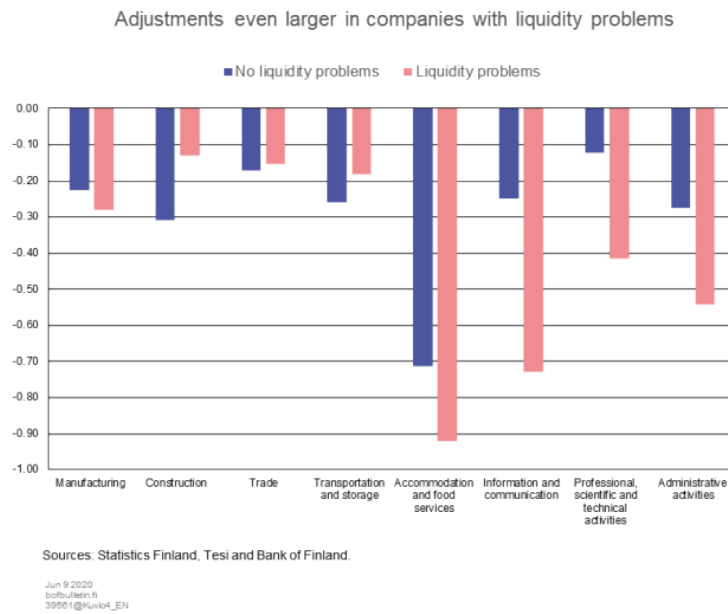
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Lay-offs will not be enough to save companies

As expected, the strongest adjustments in labour costs have been witnessed in accommodation and food services, which also reported the largest declines in turnover (Chart 4). Surprisingly, adjustments in both accommodation and food services and also in many other industries have been largest in the case of companies that have faced liquidity problems. Even the vigorous efforts by companies to cut costs via lay-offs, in addition to the reductions in social security contributions granted by the government, have in these cases not been sufficient to save companies from a cash crisis following a strong, sudden and unexpected contraction in business volumes. Smaller adjustments in companies that have avoided a cash crisis may be explained by the fact that these companies have considered cuts in labour costs as a last resort.^[4]

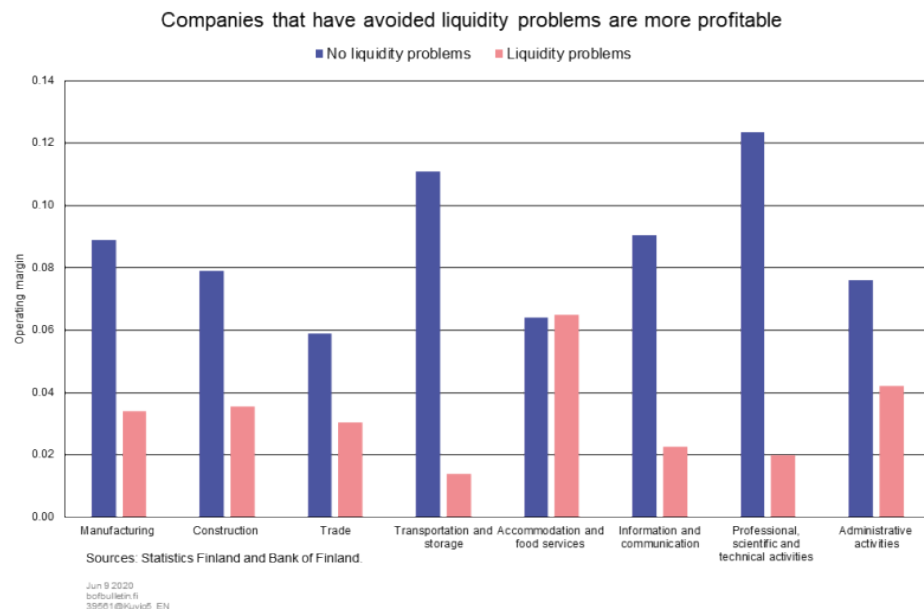
4. For example, studies on wage rigidity (for example the survey of firms conducted by the ESCB Wage Rigidity Network and comprising many European countries) show that companies are typically fairly unwilling to cut wages, because they fear a weakening in employee motivation.

Chart 4.



Companies' need to introduce lay-offs depends on many factors, in addition to a decline in turnover. Companies are fairly heterogeneous in terms of, for example, profitability, cost structure and cash position. Some companies have in principle weaker possibilities of coping with sudden unexpected difficulties like the corona crisis. Chart 5 shows that, irrespective of industry, the profitability of companies that will encounter liquidity problems was weaker than in the other companies even prior to the drop in turnover.^[5]

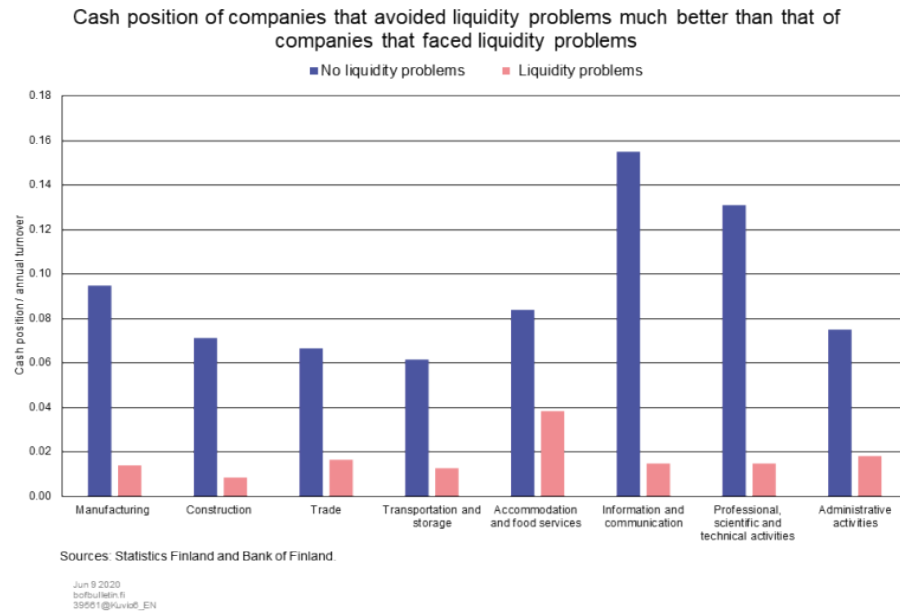
Chart 5.



5. The profitability measure is operating profit as a percentage of turnover before depreciations and amortisations (EBITDA margin, %).

As expected, a company's cash situation prior to the crisis has played an important role in how they have coped with the crisis. The cash position of the companies that faced liquidity problems was just before the crisis significantly weaker than in the case of companies that avoided liquidity problems (Chart 6).

Chart 6.



Adjustments in labour costs have saved jobs

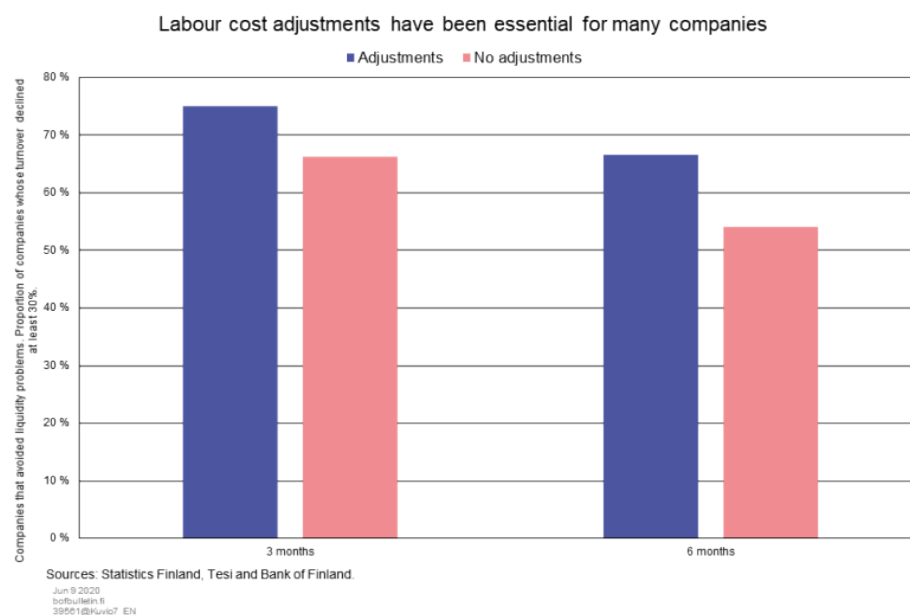
Cost adjustments introduced in March–April 2020 are helping many companies cope with a decline in turnover of at least a couple of months. Next, we examine more closely the importance of cost adjustments to companies that reported a considerable (at least 30%) decline in turnover in March–April.^[6] Based on a mechanical calculation, approximately one in every four companies in the sample would face cash problems in three months after the onset of the corona crisis. Correspondingly, approximately three-quarters of the companies would survive at least three months. For many companies that will avoid bankruptcy, the possibility to introduce downward adjustments in labour costs is of key importance for coping with the crisis. Approximately one in ten of the companies that will avoid liquidity problems would go bankrupt without the costs adjustments made in March–April (Chart 7).

If the weak economic conjuncture continues, a growing number of companies will face liquidity problems.^[7] The calculation shows that in six months, only some two-thirds of the sample companies would be able to avoid a drying up of cash. Of those companies that will avoid liquidity problems, for every five the cost adjustments introduced in March–April are essential to survival.

6. A 30% decline in turnover was strongly proposed as a criterion for general support to companies.

7. We wish to point out that this scenario is based on weaker economic developments than assumed in the Bank of Finland's June 2020 forecast for the Finnish economy; this is due to restrictions regarding the data available.

Chart 7.



Companies reporting payment difficulties. Proportion of companies that reported a minimum 30% decline in turnover in March–April.

Job losses will be permanent in respect of companies that face liquidity problems and go bankrupt. The number of these permanent job losses can be estimated based on the number of bankruptcies avoided with the help of lay-offs. Jobs may be lost permanently not only in connection with bankruptcies but also in a situation in which the company survives but is forced to make some of its employees redundant because of shrinking business volumes.^[8] Based on the data available, it was not possible to examine the significance of lay-offs due just to the decrease in companies' turnover.^[9]

Chart 8 shows the number of job losses prevented in the economy as a whole with the help of lay-offs. The number of bankruptcies in the economy as a whole is estimated based on the number of bankruptcies per industry in the sample. The industry-specific weighting coefficient is the number of persons employed in the industry.

Based on this rough estimate, lay-offs have a fairly large impact on employment. In a review horizon of three months, lay-offs help save slightly under 70,000 jobs, which corresponds to roughly 2% of the persons employed. In this estimate, we should however take into account the fact that restrictions in data availability mean the calculation probably underestimates developments in companies' turnover and cash position and is thus gloomier than, for example, the baseline scenario in the [Bank of Finland's June 2020 forecast](#).

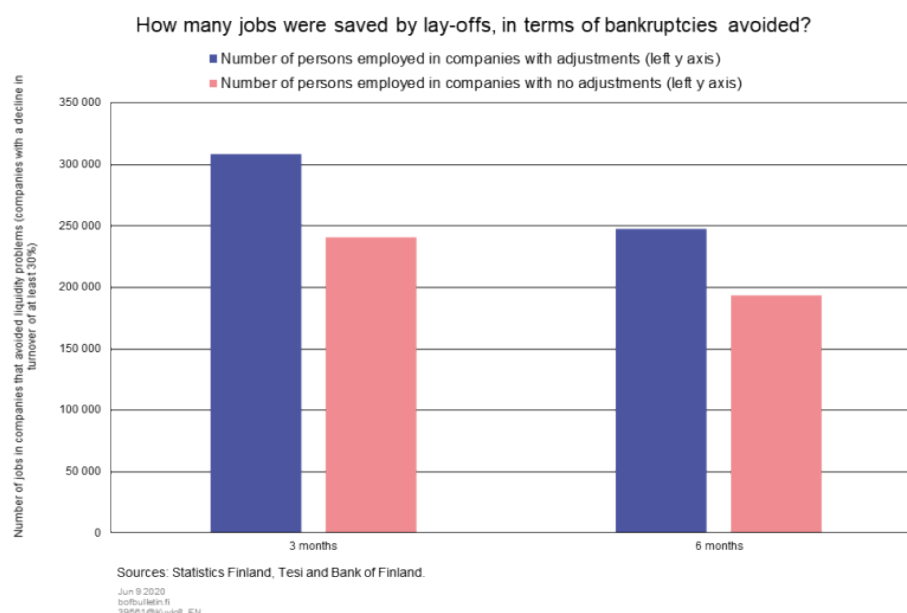
8. Nir Jaimovich & Henry E. Siu, 2020. 'Job Polarization and Jobless Recoveries', *Review of Economics and Statistics*, vol. 102(1), 129–147.

9. The number of jobs saved in the sample companies was scaled to the level of the economy as a whole, industry by industry, using as the scale factor the combined turnover of the companies in each industry relative to the turnover of the companies in the sample.

At least based on the figures calculated from the sample, the significance of lay-offs is smaller after six months than after three months from the drop in turnover. The calculation shows that six months after the onset of the corona crisis the number of jobs saved with the help of lay-offs has fallen to only 50,000. This is the case despite the fact that the impact of lay-offs on the number of companies that have avoided bankruptcy is larger after six months than after three.

Without lay-offs, many companies would not have survived even three months following the drop in turnover in March. If the crisis continues, an increasing number of companies will be driven close to the profitability margin and eventually below it. After six months, the number of job losses avoided via lay-offs is smaller than after three months. This indicates that more bankruptcies than before has been avoided in smaller companies.

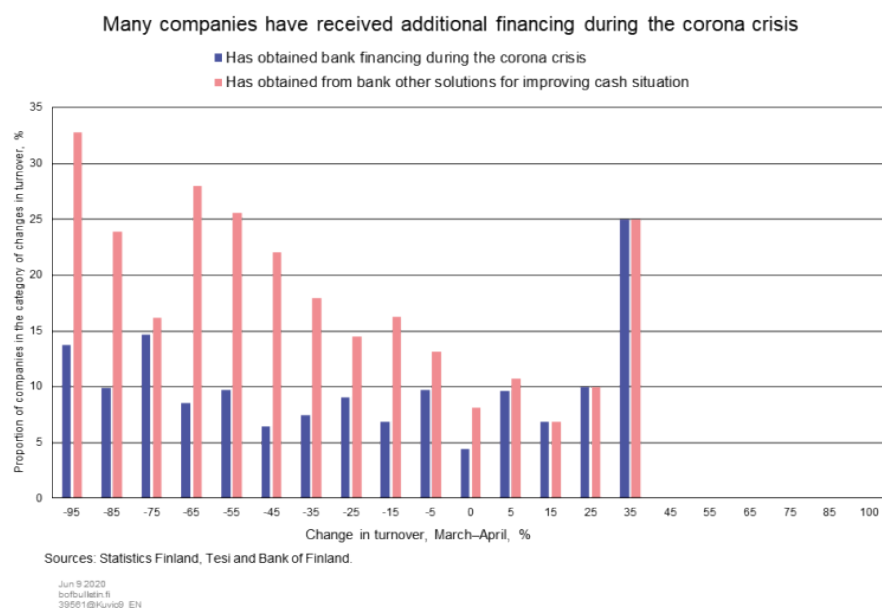
Chart 8.



Additional financing by banks has helped avoid a cash crisis

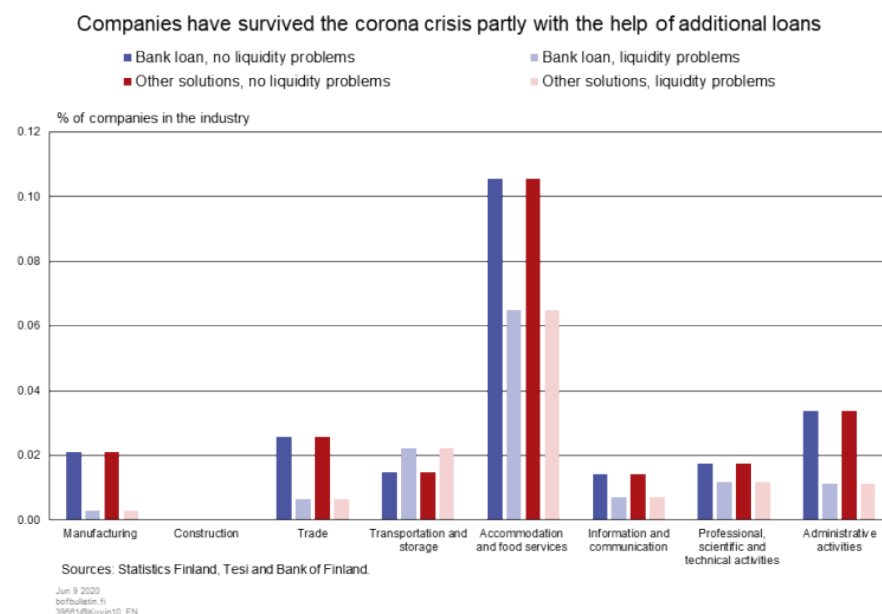
In addition to labour costs, additional financing has played a role in avoiding a cash crisis. Companies that have experienced losses in turnover have been granted bank loans during the corona crisis. Banks have also granted interest-only periods (Chart 9).

Chart 9.



Companies have been able to avoid a cash crisis partly by taking on more debt. Debt accumulation will, however, hamper their future business activities and slow their recovery from the crisis. Additional bank financing is more common particularly in the group of companies that, based on the calculation, are likely to avoid liquidity problems (Chart 10). These companies have also been granted interest-only periods more easily than other companies. This observation applies to nearly all the industries surveyed.

Chart 10.



More measures needed to save companies

The possibility of introducing labour market adjustments via lay-offs has traditionally

been an important tool on the Finnish labour market when the economy has been hit with a sudden shock. In the early phase of the corona crisis, a quarter of the sample companies experienced an over 30% decline in turnover. Particularly those companies that were hit hardest by the corona crisis reacted rapidly to shrinking turnover by cutting labour costs, mainly via lay-offs. These helped avoid bankruptcies, and based on the calculation some 70,000 jobs have been saved. In this estimate, we should however take into account that restrictions in data availability mean the calculation probably underestimates the developments in companies' turnover and cash position and is thus gloomier than, for example, the baseline scenario of the [Bank of Finland's June 2020 forecast](#).

However, lay-offs are an effective tool for adjustment only in the short term. Labour costs are adjusted in Finland typically via the size of the labour force, and not its price. In the short term, lay-offs can help avoid bankruptcies and save jobs. If wages do not have to be flexible in Finland, in contrast to our competitors, the competitiveness of our companies will be eroded, which will weaken their operating prospects and opportunities for employment going forward.

The smooth functioning of financial intermediation has also played a role during the corona crisis. Banks have granted companies that have suffered from the corona crisis additional financing and also interest-only periods that will help them through the acute phase of the crisis. By increasing borrowing, companies have been able to tackle their worst short-term financing problems, but debt accumulation will erode profitability and slow recovery from the crisis.

Lay-offs and increased borrowing are not sufficient to save all companies, not even the healthiest. We also need other solutions, for example financial support to help the companies through the worst period. New labour market flexibilities would also be welcome. However, ultimately companies will survive only if demand recovers and labour market structures are appropriate.

Tags

[profitability companies](#), [lay-offs](#), [financing conditions](#), [corona](#), [bankruptcies](#)

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Consumer confidence foreshadows developments in the economy

29 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • ECONOMIC OUTLOOK



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Consumer confidence indicators are widely used in monitoring the economic cycle, as they are thought to contain forward-looking information on the path of the economy. Changes in consumer confidence have historically preceded shifts in the economic cycle by about six months. The value of forward-looking indicators is highlighted especially during exceptional inflection points in the economy, such as during the financial crisis or the currently prevailing coronavirus crisis, as these indicators provide readily available information about the future path of the economy. The rebound in consumer confidence and the recovery of the economy appear to be intimately connected.



Consumer confidence explains variations in GDP growth and private consumption growth relatively well

Consumer confidence and its sub-indices are frequently used as forward-looking indicators for economic growth. The consumer confidence indicator compiled by Statistics Finland is used by the Bank of Finland in all of its nowcasting models^[1] to estimate current GDP growth. The relative significance of consumer confidence and its

sub-components for modelling GDP growth and private consumption growth^[2] can be evaluated by, for example, comparing in-sample fits of simple regression models where GDP growth and individual consumption expenditure growth are each regressed on a single variable and its lags.^[3]

Table 1 denotes the R-squared values for the consumer confidence indicator and its chief sub-components when serving as explanatory variables for GDP growth and private consumption growth.^[4] The R-squared statistic measures the fraction of variation in GDP growth and private consumption growth that is explained by variation in the consumer confidence indicator and its sub-components.

Statistics Finland's consumer confidence indicator comprises four sub-indices: consumer's own economy now, consumer's own economy in 12 months, Finland's economy in 12 months, and consumer's spending money on major purchases in the next 12 months compared to the past 12 months (Chart 1). In addition, expectations of unemployment in Finland in 12 months' time are included in the comparison. The R-squared values presented in Table 1 are reported for regressions where the monthly confidence indicator data have been available for all three months comprising each calendar quarter. Serving as the explanatory variable in the regression is the mean of the confidence indicator for current quarter and two lags, i.e. the means of the three observations taken over the preceding calendar quarter as well as the one before.

Based on the R-squared statistics, it can be posited that consumer confidence indicators do better, on average, at explaining GDP growth than private consumption growth (Table 1). However, the differences in the fit of the various indicators are relatively large. For example, expectations of consumer's own economy in 12 months' time explains less than a quarter of the variation in annual GDP growth, whereas the composite index explains over half of it. Similarly, expectations of economic conditions in Finland in 12 months' time performs relatively poorly in explaining private consumption growth, whereas intended spending on major purchases explains about half of it. It stands to reason that survey questions related to one's personal finances do better at predicting private consumption growth, while indicators focusing on general economic conditions perform relatively better at explaining GDP growth.

1. See, for example, <https://www.bofbulletin.fi/en/2017/5/new-tools-for-monitoring-the-economy/>.

2. This has been explored in the academic literature by e.g. S.C Ludvigson in (2004), 'Consumer confidence and consumer spending', *Journal of Economic Perspectives*, Vol. 18(2), pp. 29–50.

3. This article examines the in-sample fits produced by the consumer confidence indicator and its sub-indices, not their ability to produce out-of-sample forecasts. The relative significance of the variables may change when assessing their forecasting ability.

4. The confidence indicators are included in the regression models in levels and are used to explain annual changes in real GDP or individual consumption expenditure. The consumer confidence figures are assumed to be stationary.

Chart 1.

Consumer confidence has long been depressed by weak assessments of economic conditions in Finland

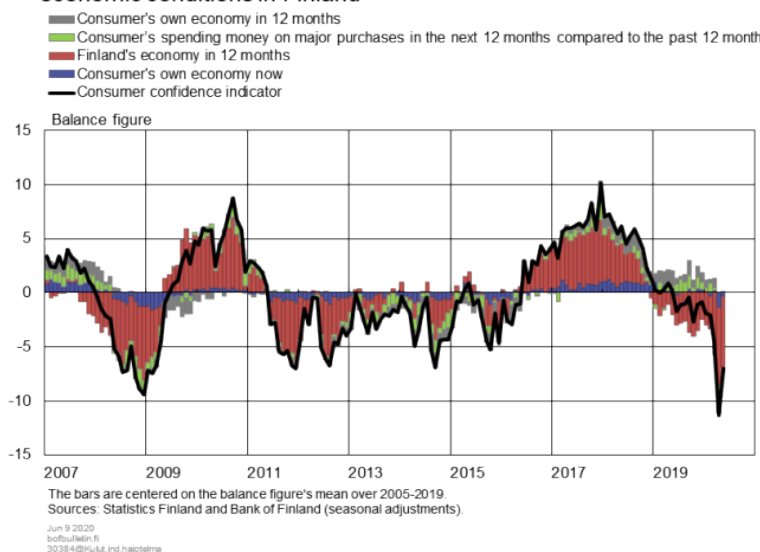


Table 1.

R-squared statistics for GDP growth and individual consumption expenditure growth

	GDP growth	Individual consumption expenditure growth
Consumer confidence, main index	0.58	0.32
Consumer's own economy now	0.47	0.45
Consumer's own economy in 12 months	0.23	0.26
Finland's economy in 12 months	0.36	0.16
Consumer's spending money on major purchases in the next 12 months compared to the past 12 months	0.57	0.49
Unemployment expectations over next 12 months	0.55	0.22

GDP growth is explained best by the main consumer confidence index, spending on major purchases over the next 12 months, and expectations of unemployment in Finland over next 12 months. The latter two indices reflect relatively specific and narrow facets of the economy. Private consumption, in turn, is best explained by expected consumer spending on major purchases. Assessments of one's own current economic situation provide a better fit for explaining private consumption growth than do expectations of one's economic position one year from now. This suggests, perhaps, that survey

respondents are better at estimating their current financial position than at predicting the future. This observation may be reversed when the variables are instead used for forecasting private consumption growth.

Beyond these variables, GDP growth is better explained by other variables, including real industrial production (R-squared 0.81) and aggregate economic sentiment (R-squared 0.67). Better fits for private consumption growth can be obtained by regressing on the volume index for retail trade (R-squared 0.61) or on sales volumes of motor vehicles (R-squared 0.58), among other variables.^[5]

Even when compared to a wider set of variables, the consumer confidence indicator's individual sub-components still perform relatively well in foreshadowing both GDP growth and private consumption growth. In addition, the consumer confidence indicator is published much earlier than, say, the volume index of industrial output, which can prove useful when forecasting. The consumer confidence indicator and its sub-indices have also been found to perform well when incorporated in models that try to predict turning points in the economic cycle.^[6]

Consumer confidence can foreshadow turning points in the economic cycle

The viability of consumer confidence as a forward-looking indicator is especially interesting during the inflection points of the economic cycle. Periods of recession raise economic uncertainty, which can cause consumers to delay their consumption. Hence the return of consumer confidence may foreshadow a turn in the economic cycle. Conversely, sustained consumer pessimism may delay a similar recovery. In the following, we examine how movements in consumer confidence have correlated with turning points in the business cycle.

Statistics Finland began conducting its Consumer Confidence Survey (formerly Consumer Barometer) in its current format in 1995. Before this, the agency published an earlier rendition of the indicator beginning from 1987, but its data are not entirely comparable with the current iteration.^[7] Nevertheless, the Finnish economy experienced two major recessions over the combined time period: the Finnish depression of the 1990s and the 2008–2009 financial crisis.

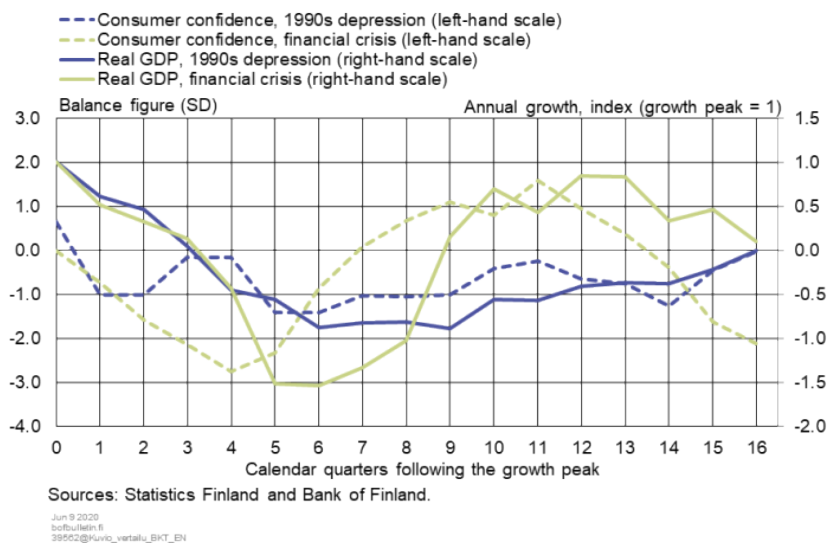
5. All regressors other than the confidence variables are included as year-on-year growth rates.

6. See e.g. Christiansen, C, Eriksen, J N and Møller, S T (2014) Forecasting US recessions: The role of sentiment, *Journal of Banking and Finance*, 49:459–468; and for Finland, e.g. Pönkä, H and Stenborg, M (2019) Forecasting the state of the Finnish business cycle, Ministry of Finance publications 20219:13.

7. The time series for the historical consumer confidence indicator is available from Statistics Finland for research purposes. The backwards-chained consumer confidence indicator is strictly an unofficial time series.

Chart 2.

The return of consumer confidence foreshadows recovery in annual GDP growth, especially during the financial crisis



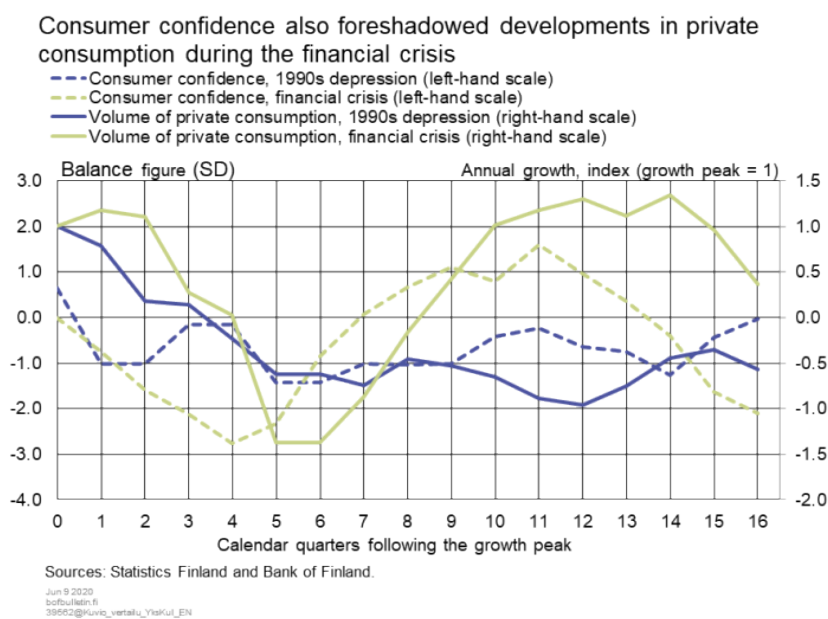
Charts 2 and 3 illustrate the temporal relationship between the consumer confidence indicator and year-on-year growth in GDP and private consumption expenditure during the 1990s depression and the financial crisis. In both charts, the annual growth rates for real GDP and private consumption expenditure are respectively indexed at the expansionary peak of each business cycle, meaning that the annual growth index receives the value 1 in the calendar quarter where year-on-year GDP growth is at its peak.

Before the 1990s depression the expansionary phase of the economic cycle peaked during the third quarter of 1989, when GDP increased by almost 7% on the previous year. Before the financial crisis, in turn, annual GDP growth peaked during the fourth quarter of 2007, at almost 6% over the previous year. The charts display annual growth rates for 16 quarters or, equivalently, four years following the expansionary peak preceding each recession. The consumer confidence indicator has been standardised for each period, i.e. it is denoted as standard deviations (SD) from its historical mean over each respective period.^[8] This makes the level of the confidence indicator easier to compare over both recessionary periods. As a rule of thumb, observations that fall at least two standard deviations above or below the mean can be considered historically unusual.

The recovery of consumer confidence preceded the economic recovery by about two calendar quarters during the financial crisis. Similarly, diminishing consumer confidence portended a decline in GDP growth at the threshold of the European sovereign debt crisis, which began in 2012 (Chart 2).

8. The historical indicator has been standardised over the sample period 1987–1994, and the current indicator over 1995–2019.

Chart 3.



Over the entire more recent sample period (1995Q4–2019Q4), the consumer confidence indicator sees its highest temporal correlation with annual GDP growth two quarters in the future (correlation coefficient 0.83).^[9] Looking at the confidence indicator's sub-components, expectations of general economic conditions in 12 months' time correlate most strongly with GDP growth three quarters into the future. By contrast, assessments of one's own economic situation in 12 months and intentions of spending money on major purchases over the next 12 months correlate most highly with GDP growth just one quarter ahead.

Consumer confidence's temporal relationship with private consumption growth during the financial crisis is very similar to its relationship with annual GDP growth (Chart 3). Over the entire sample period the confidence indicator correlates most strongly with annual private consumption growth 2–3 quarters into the future (correlation coefficient 0.67).

By contrast, consumer confidence and business cycle developments appear not to have diverged notably from each other during the 1990s depression (Charts 2 and 3). The nature of the 1990s depression was different from the financial crisis. The former not only began, but also advanced slowly, driven by a multitude of individual factors, and so did its recovery also take a significant amount of time. It would appear that during the Finnish depression of the 1990s protracted economic recession and consumer pessimism went hand in hand. This stands in contrast to the financial crisis, which began more abruptly, whose contractionary phase was deeper, and whose subsequent recovery phase was rapid.

Looking at the 1988Q1–1994Q4 sample period, the historical consumer confidence

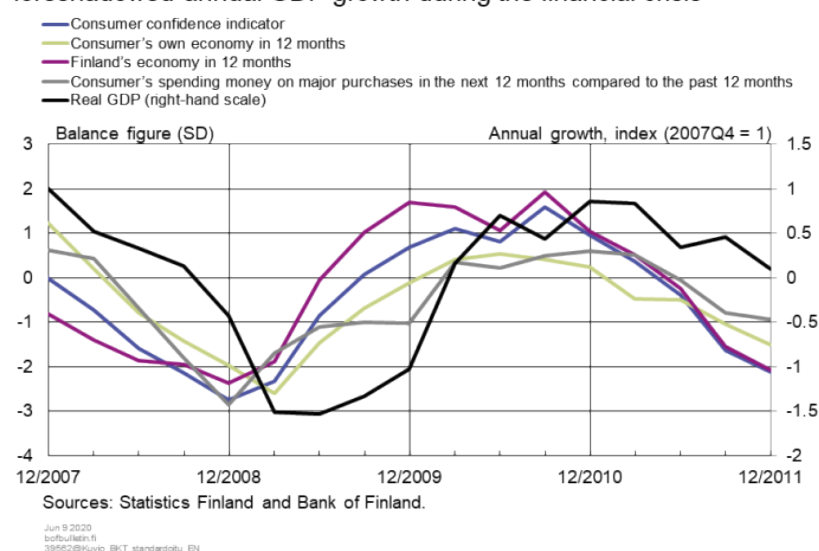
9. This temporal correlation structure is consistent with the observation that the fits of the regression models introduced in section 1 do not noticeably improve when more than two lags of the confidence indices are included.

indicator is still most highly correlated with annual GDP growth two calendar quarters into the future (correlation coefficient 0.81), just as in the later sample period.^[10] Similarly, when the entire combined 1988Q1–2019Q4 time period is examined, the resulting unofficial chain-linked confidence indicator still correlates most strongly with GDP growth two calendar quarters ahead (correlation coefficient 0.79). Thus the temporal correlation structure between consumer confidence and the business cycle appears to have remained quite stable over recent decades. Over the entire time period, the strongest correlation between private consumption growth and consumer confidence is observed when the consumer confidence indicator is lagged by two quarters (correlation coefficient 0.65).

Charts 4 and 5 illustrate in greater detail the temporal relationship between the consumer confidence indicator's forward-looking sub-components and changes in GDP and private consumption expenditure during the financial crisis and after, 16 quarters on from the expansionary peak.

Chart 4.

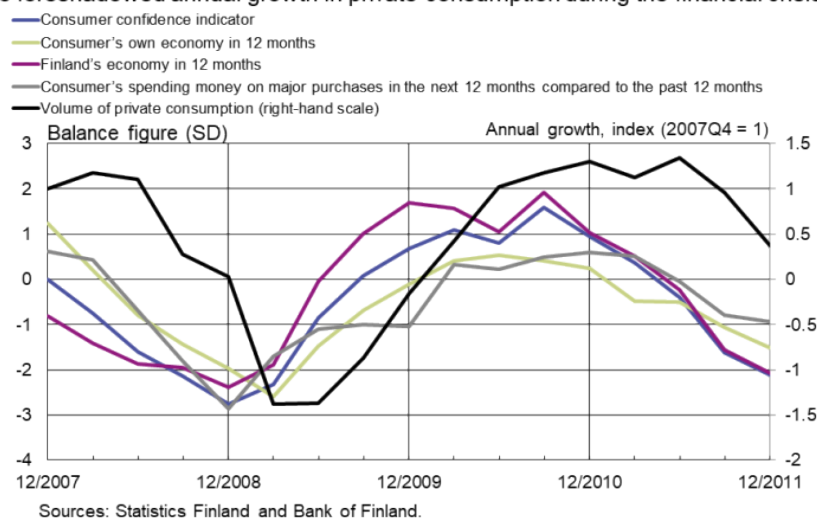
The consumer confidence indicator's forward-looking sub-components foreshadowed annual GDP growth during the financial crisis



10. Due to the short sample (N=28) the strength of the correlation is subject to statistical uncertainty.

Chart 5.

The consumer confidence indicator's forward-looking sub-components also foreshadowed annual growth in private consumption during the financial crisis



Conclusions

Consumer confidence has historically served as a forward-looking indicator for both GDP growth and private consumption growth. It would also seem that, at least during the financial crisis, the consumer confidence indicator, as well as several of its sub-components, foreshadowed a turning point for the cyclical trough. In addition, relatively good in-sample fits can be obtained by regressing GDP growth and private consumption growth on the consumer confidence indicator and its sub-components.

On the other hand, the explanatory power of the consumer confidence indicator and its sub-indices for GDP growth are weaker than with many other economic indicators. The extent to which data gathered from consumer confidence surveys actually yields new, independent information on consumer intentions remains unclear. It is likely that consumers base their assessments of the economy in general on publicly available information, such as financial news. Consequently, the information contained in the consumer confidence indicator might also be found in other, 'hard' indicators, such as volume indices for industrial output or trade volumes, which indeed fare better at explaining GDP growth. On the other hand, such indicators become available much later than the consumer confidence indicator, so the latter still has an important role in predicting shifts in the economy.

Drawing comparisons between the two major recessions in Finland's recent economic history — the 1990s depression and the financial crisis — is difficult, as the information contents and methodology of the confidence indicator has changed in the intervening period. In addition, the analysis presented in the previous sections does not allow anything to be inferred about the causal relationship between consumer confidence and the pace of economic recovery. Nevertheless, there appears to be a strong correlation between the two. Put differently, the return of consumer confidence and the recovery of the economy are tightly interlinked. The temporal relationship between developments in

consumer confidence and the economic cycle also seems to have remained quite stable over recent decades: change in the confidence indicator's balance figure anticipates change in GDP growth and private consumption growth about two quarters ahead.

The current crisis brought on by the coronavirus pandemic is so far more reminiscent of the financial crisis than the 1990s depression. Similar to the financial crisis, confidence has collapsed in response to a sudden external shock. It remains a distinct possibility that consumer confidence and economic activity will both recover quickly once the spread of the coronavirus has been contained and once it becomes possible to gradually begin lifting the lockdown measures put in place. However, the uncertainty caused by the virus may deter the return of confidence, even well past the time when the actual lockdown measures can be lifted. Because the coronavirus poses a tangible threat to health and human life, consumers may remain cautious until it is likely that the virus has been permanently thwarted.

Tags

[economic cycles](#), [consumer confidence](#), [corona](#)

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FORECAST TABLES

Forecast tables for 2020–2022 (June 2020)

9 JUN 2020 11:00 AM • BANK OF FINLAND BULLETIN 3/2020 • ECONOMIC OUTLOOK

The Finnish economy will contract by around 7% this year and grow around 3% per annum over the next 2 years. The forecast contains a large degree of uncertainty – the contraction could be only 5% or as much as 11%, depending on how the pandemic develops. See forecast tables for the Finnish economy in 2020–2022 (June 2020).

June 2020

1. BALANCE OF SUPPLY AND DEMAND, VOLUMES, AT REFERENCE YEAR 2010 PRICES

Volume, % change on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
GDP at market prices	1.6	1.0	–6.9	3.0	2.9
Imports of goods and services	5.5	2.2	–9.4	2.4	6.8
Exports of goods and services	1.7	7.2	–15.8	4.4	7.0
Private consumption	1.7	1.0	–6.4	4.6	3.4
Public consumption	2.1	0.9	5.5	0.1	0.1
Private fixed investment	3.5	–1.0	–12.4	–1.1	6.0
Public fixed investment	5.0	0.3	6.0	–0.3	0.4

Sources: Bank of Finland and Statistics Finland.

2. CONTRIBUTIONS TO GROWTH¹

	2018	2019	2020 ^f	2021 ^f	2022 ^f
GDP, % change	1.6	1.0	-6.9	3.0	2.9
Net exports	-1.4	1.9	-2.6	0.7	0.0
Domestic demand excl. inventory change	2.3	0.5	-4.2	2.3	2.9
of which Consumption	1.5	0.7	-2.1	2.5	1.8
Investment	0.9	-0.2	-2.2	-0.2	1.0
Inventory change + statistical discrepancy	0.7	-1.4	0.0	0.1	0.0

¹ 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 2010 = 100. and % change on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
GDP at market prices	114.9	117.0	117.3	118.4	120.5
	1.8	1.8	0.3	0.9	1.8
Imports of goods and services	105.1	105.4	101.6	102.6	103.9
	3.4	0.3	-3.6	1.0	1.2
Exports of goods and services	107.3	106.6	103.9	104.4	105.9
	4.2	-0.7	-2.5	0.4	1.5
Private consumption	113.1	114.3	114.6	115.4	117.1
	1.2	1.1	0.2	0.8	1.4
Public consumption	113.7	117.0	117.6	119.1	121.5
	1.4	2.9	0.5	1.3	2.0
Private fixed investment	116.6	119.8	117.1	118.6	121.1
	2.6	2.8	-2.3	1.3	2.0
Public fixed investment	115.2	117.1	117.7	119.2	121.0
	2.0	1.6	0.5	1.3	1.5
Terms of trade (goods and services)	102.1	101.1	102.3	101.7	102.0
	0.8	-1.0	1.1	-0.6	0.3

Sources: Bank of Finland and Statistics Finland.

4. BALANCE OF SUPPLY AND DEMAND, AT CURRENT PRICES

EUR million and % change
on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
GDP at market prices	233,619	240,078	224,189	232,995	244,144
	3.4	2.8	-6.6	3.9	4.8
Imports of goods and services	92,499	94,807	82,818	85,614	92,521
	9.0	2.5	-12.6	3.4	8.1
Total supply	326,118	334,885	307,007	318,609	336,666
	5.0	2.7	-8.3	3.8	5.7
Exports of goods and services	90,174	95,975	78,743	82,582	89,674
	6.0	6.4	-18.0	4.9	8.6
Consumption	177,129	181,711	177,232	184,521	191,849
	3.1	2.6	-2.5	4.1	4.0
Private	123,740	126,256	118,433	124,890	130,948
	3.0	2.0	-6.2	5.5	4.9
Public	53,389	55,455	58,799	59,631	60,901
	3.5	3.9	6.0	1.4	2.1
Fixed investment	55,819	56,816	50,720	50,894	54,370
	6.3	1.8	-10.7	0.3	6.8
Private	45,956	46,760	40,006	40,075	43,351
	6.2	1.7	-14.4	0.2	8.2
Public	9,863	10,056	10,715	10,819	11,020
	7.0	2.0	6.6	1.0	1.9
Inventory change + statistical discrepancy	2 997	383	311	612	772
% of previous year's total demand	0.5	-0.8	0.0	0.1	0.1
Total demand	326,118	334,885	307,007	318,609	336,666
	5.0	2.7	-8.3	3.8	5.7
Total domestic demand	235,944	238,910	228,264	236,026	246,992
	4.6	1.3	-4.5	3.4	4.6

4. BALANCE OF SUPPLY AND DEMAND, AT CURRENT PRICES

Sources: Bank of Finland and Statistics Finland.

5. BALANCE OF SUPPLY AND DEMAND

% in proportion to GDP at current prices

	2018	2019	2020 ^f	2021 ^f	2022 ^f
GDP at market prices	100.0	100.0	100.0	100.0	100.0
Imports of goods and services	39.6	39.5	36.9	36.7	37.9
Exports of goods and services	38.6	40.0	35.1	35.4	36.7
Consumption	75.8	75.7	79.1	79.2	78.6
Private	53.0	52.6	52.8	53.6	53.6
Public	22.9	23.1	26.2	25.6	24.9
Fixed investment	23.9	23.7	22.6	21.8	22.3
Private	19.7	19.5	17.8	17.2	17.8
Public	4.2	4.2	4.8	4.6	4.5
Inventory change + statistical discrepancy	1.3	0.2	0.1	0.3	0.3
Total demand	139.6	139.5	136.9	136.7	137.9
Total domestic demand	101.0	99.5	101.8	101.3	101.2

Sources: Bank of Finland and Statistics Finland.

6. PRICES

Index 2010 = 100, and % change on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
Harmonised index of consumer prices, 2015 = 100	102.4	103.6	103.7	104.5	105.8
	1.2	1.1	0.2	0.7	1.3
Consumer price index, 2015 = 100	102.2	103.3	103.3	104.0	105.4
	1.1	1.0	0.1	0.7	1.3
Private consumption deflator	113.1	114.3	114.6	115.4	117.1
	1.2	1.1	0.2	0.8	1.4
Private investment deflator	116.6	119.8	117.1	118.6	121.1
	2.6	2.8	-2.3	1.3	2.0
Exports of goods and services deflator	107.3	106.6	103.9	104.4	105.9
	4.2	-0.7	-2.5	0.4	1.5
Imports of goods and services deflator	105.1	105.4	101.6	102.6	103.9
	3.4	0.3	-3.6	1.0	1.2
Value-added deflators					
Value-added, gross at basic prices	114.8	117.1	117.6	118.9	121.0
	1.8	1.9	0.4	1.1	1.8
Private sector	115.0	116.8	117.2	118.5	120.5
	1.8	1.6	0.3	1.1	1.7
Public sector	113.9	118.0	118.9	120.4	122.8
	1.6	3.6	0.7	1.3	2.0

Sources: Bank of Finland and Statistics Finland.

7. WAGES AND PRODUCTIVITY

% change on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
Whole economy					
Index of wage and salary earnings	1.7	2.4	1.8	2.5	2.0
Compensation per employee	1.2	1.6	-0.5	5.4	2.2
Unit labour costs	2.1	1.7	3.9	1.8	0.1
Labour productivity per employed person	-0.9	-0.1	-4.2	3.5	2.1

Sources: Bank of Finland and Statistics Finland.

8. LABOUR MARKET

1.000 persons and % change on previous year

	2018	2019	2020 ^f	2021 ^f	2022 ^f
Labour force survey (15–74-year-olds)					
Employed persons	2 538	2 567	2 495	2 483	2 503
	2.6	1.1	-2.8	-0.5	0.8
Unemployed persons	202	184	247	255	240
	-13.8	-8.7	34.0	3.4	-5.8
Labour force	2 740	2 751	2 742	2 739	2 744
	1.2	0.4	-0.3	-0.1	0.2
Working-age population (15–64-year-olds)	3 439	3 428	3 422	3 415	3 411
	-0.4	-0.3	-0.2	-0.2	-0.1
Labour force participation rate, %	66.4	66.6	66.5	66.6	66.9
Unemployment rate, %	7.4	6.7	9.0	9.3	8.8
Employment rate (15–64-year-olds), %	71.7	72.5	70.8	70.6	71.2

Sources: Bank of Finland and Statistics Finland.

9. GENERAL GOVERNMENT REVENUE. EXPENDITURE. BALANCE AND DEBT

	2018	2019	2020 ^f	2021 ^f	2022 ^f
% of GDP					
General government revenue	52.5	52.2	52.3	53.1	52.7
General government expenditure	53.4	53.3	60.3	58.0	56.5
General government primary expenditure	52.5	52.4	59.5	57.2	55.7
General government interest expenditure	0.9	0.9	0.8	0.8	0.7
General government net lending	-0.9	-1.1	-8.0	-4.9	-3.8
Central government net lending	-1.2	-1.2	-5.7	-3.1	-2.3
Local government net lending	-0.9	-1.2	-2.1	-2.0	-2.0
Social security funds	1.3	1.2	-0.2	0.3	0.4
General government primary balance	0.1	-0.3	-7.1	-4.1	-3.1
General government debt (consolidated. EDP)	59.2	59.4	71.3	73.3	74.5
Central government debt	44.9	44.3	53.3	54.1	54.3
Tax ratio	42.4	42.1	42.1	43.1	42.8
Current prices, EUR billion					
General government net lending	-2.0	-2.7	-17.9	-11.4	-9.3
Central government net lending	-2.8	-2.8	-12.7	-7.3	-5.5
Local government net lending	-2.1	-2.9	-4.7	-4.7	-4.8
Social security funds	2.9	2.9	-0.5	0.6	1.0
General government debt (consolidated. EDP)	138.412	142.507	159,003	170.8651	181.9764
Sources: Bank of Finland and Statistics Finland.					

10. BALANCE OF PAYMENTS

EUR billion

	2018	2019	2020 ^f	2021 ^f	2022 ^f
Exports of goods and services (SNA)	90.2	96.0	78.7	82.6	89.7
Imports of goods and services (SNA)	92.5	94.8	82.8	85.6	92.5
Goods and services account (SNA)	-2.3	1.2	-4.1	-3.0	-2.8
% to GDP	-1.0	0.5	-1.8	-1.3	-1.2
Investment income and other items, net (+ statistical discrepancy)	0.9	-0.5	1.4	1.3	1.3
Current transfers, net	-2.3	-2.4	-2.4	-2.6	-2.7
Current account, net	-3.8	-18.1	-5.0	-4.4	-4.3
Net lending, % to GDP					
Private sector	-0.8	0.4	5.7	3.0	2.0
Public sector	-0.9	-1.1	-8.0	-4.9	-3.8
Current account, % to GDP	-1.6	-0.8	-2.3	-1.9	-1.8

Sources: Bank of Finland and Statistics Finland.

11. INTEREST RATES

%

	2018	2019	2020 ^f	2021 ^f	2022 ^f
3-month Euribor ¹	-0.3	-0.4	-0.4	-0.4	-0.4
Average interest rate on new loan drawdowns ²	1.8	1.8	1.8	1.8	1.8
Average interest rate on the stock of loans ²	1.3	1.3	1.3	1.3	1.3
Average interest rate on the stock of deposits ³	0.1	0.1	0.1	0.1	0.1
Yield on Finnish 10-year government bonds ¹	0.7	0.1	0.0	0.1	0.3

¹ Technical assumption derived from market expectations.

² Finnish credit institutions' loans to households and non-financial corporations (excl. overdrafts, credit card credits and repurchase agreements).

³ Finnish credit institutions' deposits from households and non-financial corporations.

Source: Bank of Finland.

12. INTERNATIONAL ENVIRONMENT

The Eurosystem staff projections

	2018	2019	2020 ^f	2021 ^f	2022 ^f
Real GDP, volume, % change on previous year					
World	2.9	0.9	−4.5	6.0	4.8
USA	2.9	2.3	−6.4	3.6	2.1
Euro area	1.9	1.2	−8.7	5.2	3.3
Japan	0.3	0.7	−5.5	2.5	1.08656
Real imports, volume, % change on previous year					
World	4.6	−0.3	−12.9	8.0	4.3
USA	4.4	1.0	−17.7	10.2	3.8
Euro area	2.7	3.9	−12.0	7.4	5.3
Japan	3.7	−0.6	−11.7	3.9	1.4
Index, 2010 = 100, and % change on previous year					
Import volume in Finnish export markets	112.8	114.7	98.5	107.2	112.7
	3.7	1.6	−14.1	8.8	5.1
Export prices of Finland's competitors (excl. oil), in national currencies	106.4	107.7	105.4	106.7	109.2
	5.3	1.2	−2.1	1.2	2.4
Export prices of Finland's industrial competitors (excl. oil), in euro	99.7	101.3	97.6	98.4	100.8
	1.4	1.6	−3.7	0.9	2.4
Industrial raw materials (excl. energy), HWWA index, in US dollars	124.8	124.2	113.7	117.3	121.6
	5.6	−0.5	−8.5	3.2	3.7
Oil price, USD per barrel ¹	108.1	97.4	54.8	56.6	61.9
	30.6	−9.9	−43.7	3.2	9.5
Finland's nominal competitiveness indicator ²	107.5	107.0	108.8	109.1	109.1
	3.8	−0.4	1.6	0.3	0.0
US dollar value of one euro ¹	1.18	1.12	1.09	1.08	1.08

12. INTERNATIONAL ENVIRONMENT

	4.5	-5.2	-2.8	-0.5	0.0
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¹ Technical assumption derived from market expectations.

² Narrow, supplemented with euro area countries, January–March 1999 = 100.

Sources: Bank of Finland and European Central Bank.

13. CURRENT AND DECEMBER 2019 FORECAST

	2019	2020 ^f	2021 ^f	2022 ^f
GDP, % change	1.0	-6.9	3.0	2.9
December 2019	1.3	0.9	1.1	1.3
Inflation (HICP), %	1.1	0.2	0.7	1.3
December 2019	1.2	1.2	1.4	1.6
Current account, % to GDP	-0.8	-2.3	-1.9	-1.8
December 2019	-1.3	-1.3	-1.1	-0.9
General government net lending, % to GDP	-1.1	-8.0	-4.9	-3.8
December 2019	-1.0	-1.5	-1.5	-1.5
General government debt (EDP), % to GDP	59.4	71.3	73.3	74.5
December 2019	58.8	59.1	60.1	60.8
Unemployment rate, %	6.7	9.0	9.3	8.8
December 2019	6.7	6.7	6.6	6.4
Employment rate, 15–64-year-olds, %	72.5	70.8	70.6	71.2
December 2019	72.5	72.7	73.0	73.4

Source: Bank of Finland.

Tags

indicators, forecast, economic situation