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EDITORIAL

Ukraine war blurring economic outlook – ECB monetary policy normalisation continues

21 Jun 2022 – Bank of Finland Bulletin 2/2022 – Finnish economy

Russia's cruel and senseless war in Ukraine is causing great destruction and suffering. The war's impacts are being felt around the world, and people are having to pay higher prices for energy and food. Growth in Finland's economy is slowing, and even a recession cannot be ruled out. Key ECB interest rates will be raised in July and a further hike is expected in September. The aim is to ensure that inflation stabilises at its 2% target over the medium term. In fiscal policy it is now time to refrain from new measures aimed at stimulating aggregate demand and instead to focus on strengthening the sustainability of Finland's public finances.



Russia's war in Ukraine is weakening the economic outlook and further fuelling the rise in prices. Above all, it is causing untold suffering to the Ukrainian people. As the war drags on, the strong focus on supporting Ukraine must be maintained.

Growth in the economy is slowing as a consequence of the war. The rekindled level of consumer confidence among Finns at the start of the year was quickly dampened by the war. The uncertainty surrounding the scale, duration and impact of the war is being felt in the economy more extensively, too. Business confidence is weakening as well, although survey results suggest that companies are still optimistic about the opportunities for finding new markets to replace lost trade with Russia. Not all companies will be able to replace lost markets, and uncertainty is not an incentive to

invest. The risk that Finland's economic performance will fall short of the forecast is now significant, and if this materialises, a recession is even possible.

Prices were already rising before Russia's invasion of Ukraine. Energy prices have been a major contributor to inflation, although considerable swings in these have been seen before. Supply chain and logistics problems caused by the pandemic, combined with a refocus of consumer demand from services to products, has led to widespread shifts in relative prices. However, Russia's war and its consequences have further tightened energy and raw material markets.

Inflation in recent months has been climbing faster than anticipated. Major increases in energy and raw material prices are also being transmitted more broadly to the prices of other products and services.

The powerful surge in inflation calls for monetary policy normalisation to be expedited. The European Central Bank is proceeding with determination and on a proactive basis. At the latest meeting of the Governing Council of the ECB we took the decision to end net purchases under the extensive APP asset purchase programme at the start of July 2022. Key ECB interest rates will be raised in July and a further hike is expected in September. The primary objective of monetary policy is to ensure that inflation stabilises at 2% over the medium term.

The sharp rise in consumer prices is currently weakening the purchasing power of households, which has led to calls for the Government and employers to act. The rising costs of filling up the petrol tank or the shopping trolley are very real. It is difficult to compromise over essential spending. Many countries, including Finland, have sought to soften the impact of rising energy prices for households through various support measures. Such measures must be targeted effectively at those most in need. By disengaging from the use of Russian fossil fuel, we can cease funding Russia's war and at the same time accelerate significantly the green transition that lies ahead. The impact of price signals on fossil fuel demand should not be dispelled completely.

Household purchasing power was growing for a number of years prior to the pandemic, and wages were rising at a rate that was higher than inflation, but now the situation is different. The rate at which pay has been rising has so far been moderate, but pressures are growing for the next wage bargaining rounds. If these turn out to produce major pay increases, this will feed through to consumer prices. A vicious circle of rising prices and wages would be disastrous for the economy.

Based on the moderate pay rises seen early in the year, Finnish companies are, for the time being, retaining their competitiveness in relation to peer countries. The next wage bargaining rounds will be of greater significance in terms of competitiveness. If we have the patience to look beyond the inflation spike, then the competitiveness of Finnish labour and production can be retained and the purchasing power of employees can be strengthened sustainably in future years. But if the situation intensifies into one of wage competition, as it did before the global financial crisis, then competitiveness could be quickly eroded, especially if the economic circumstances are challenging. Tackling a loss of cost competitiveness takes a long time and is considerably more difficult than losing such competitiveness.

Competitiveness is important when replacement markets are being sought to counter the loss of Russian markets. Raw materials imported from Russia will be replaced with other sources, but the price may be higher. The prices of production inputs are currently rising rapidly in any case, and so increases in the prices of end products can be expected. Cost competitiveness will therefore be a significant element in the new competitive environment.

In the labour market there is again demand for skilled workers, and many sectors are struggling with labour shortages. With the unemployment rate still exceeding 6%, it is apparent that there are considerable regional and occupational mismatch problems in the Finnish labour market. This is why investment is needed for skills development in secondary and tertiary education and among businesses. The shortage of skilled and educated labour will become more acute in the future, and in the longer term this will also restrict growth in the Finnish economy. Finland also needs skilled people from abroad.

The employment rate has increased quickly, but nationally the number of hours worked is still less than the level reached before the pandemic. The increase in part-time work is to an extent a natural step, and for many it can be a suitable solution for their own particular situation. But if the higher rate of employment continues in future to derive mainly from an increase in part-time work, the achievement of the employment rate objective will not in itself be sufficient to balance the public finances.

Urgently managing the COVID-19 crisis placed a considerable burden on the public finances. The problem lies not so much with the amount of debt in relation to the size of Finland's economy, but the path which that debt is taking. The debt ratio will grow further in the immediate years ahead, because fiscal policy is still expansionary. The imbalance in the public finances will not correct itself, however. In an environment of rising interest rates, achieving a balance will require a more sharply focused scrutiny of public revenues and expenditure. A comprehensive and regular spending review would support the needs of decision-makers in this.

The crises of recent years have demonstrated the importance of sustainable general government finances. Securing ecological sustainability will call for profound changes across society. Without sustainable public finances, it will not be possible to use public funds to lessen the negative effects on households and businesses of the changes taking place, which may threaten social sustainability. These long-term challenges are already requiring increasing attention in current decision-making.

It is important to make sure Finland has enough skilled workers and to ensure there are sufficient incentives to work. With the right skills we can carry out high-quality research and product development, although hastening R&D work might also need a nudge from the government sector. In unstable times, companies value a stable operating environment, sensible regulation and smoothly functioning permit processes. A competitive domestic market will prepare companies for international markets and will keep price rises in check.

We are, regrettably, living through exceptional times. Geopolitics is rearing up and shaking the economy, and this is now affecting daily lives here in Finland, too, and the

view ahead is uncertain. The situation calls for resilience and patience – and a robust spirit of togetherness.

The ECB's monetary policy will underpin Europe's ability to cope in this changing world. The same kind of resolve is needed extensively across society. If the COVID-19 pandemic and Russia's war in Ukraine have shown us anything, it is at least that we in Finland still have the ability to roll up our sleeves and set to work when confronted with difficult problems. It is certainly a long time since this ability has been in such high demand, in the field of security and in the economy.

Helsinki, 21 June 2022

Olli Rehn

Governor of the Bank of Finland

Tags

[Ukraine](#), [forecast](#), [economic growth](#), [Russia](#), [war](#), [inflation](#), [monetary policy](#)

FORECAST FOR THE FINNISH ECONOMY

Russia's war in Ukraine is stifling Finland's economic recovery

Today – Bank of Finland Bulletin 2/2022 – Finnish economy

Russia's war in Ukraine is weakening the outlook for the Finnish economy and pushing up inflation. Foreign trade with Russia is collapsing as a result of the war, and higher uncertainty and inflation are undermining the prospects for consumption and investment. Finland's economy was growing well before the war started, and this will serve as a good foundation for the year's growth overall. The Finnish economy is projected to grow by 1.7% in 2022, but growth will slow to 0.5% in 2023 due to the impacts of the war. Growth will then pick up to 1.5% in 2024, as the difficulties in the global economy subside and inflation moderates.



Russia's war in Ukraine is weakening growth in the global economy because it is increasing uncertainty, exacerbating supply shocks and raising raw material, food and energy prices. The continuation of the COVID-19 pandemic is also helping to sustain supply chain bottlenecks and uncertainty in the world economy. The forecast assumes that the impacts of the war and the pandemic will gradually subside.

Growth in private consumption is being curbed not only by the uncertain economic outlook but also by the high level of inflation. Rising prices will erode households' purchasing power this year, although this will be offset in part by the use of savings accumulated during the pandemic. Employment growth, which has been strong so far, may be curtailed by the deterioration in the economy caused by the war. Rising costs will reduce private investment. The volume of exports will be far short of what had been

forecast earlier, but new markets will be found in the immediate years ahead to make up for the lost business in Russia.

Russia's invasion of Ukraine has created new expenditure needs in Finland's public finances, which were already weakened by the pandemic. The general government deficit relative to GDP will shrink somewhat in the coming years, but the public finances will remain in deficit and the debt ratio will begin to edge upwards again.

Supply chain bottlenecks and more expensive raw materials will fuel inflation across a broad front this year. The rise in food prices has accelerated on the back of higher world market prices for energy, fertilisers and raw materials, while consumer goods prices have risen due to availability problems. Services prices will also pick up as demand for services recovers and goods inflation is passed on to service prices. In 2023, inflation will slow, however, in response to a gradual moderation in energy prices, better availability of goods and raw materials, slower growth in aggregate demand and the expected rise in market rates.

Cost competitiveness will play an important role in efforts to find new markets to make up for lost business in Russia. Projections of aggregate unit labour costs adjusted for the terms of trade suggest that Finland's cost competitiveness will improve slightly in 2022 and remain almost the same during the last years of the forecast period. However, forecasts of both productivity growth and the price of labour are surrounded by a considerable degree of uncertainty.

The growth in Finland's economy may turn out to be lower than forecast, and even a recession cannot be ruled out. The uncertainty surrounding global economic growth is sustained not only by the war but also by the pandemic, and there are risks related particularly to the Chinese economy. In the near future, inflation may climb higher than forecast, and the increase in market rates may be faster than assumed. On the other hand, the economy may perform better than expected, in spite of the many downside risks. Both exports and domestic demand could pick up by more than anticipated if companies are able to adjust quickly to the supply chain bottlenecks and find new markets to replace those lost.

Table 1.

Key forecast outcomes (1/2)					
Percentage change on the previous year	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP	-2.3	3.5	1.7	0.5	1.5
Private consumption	-4.1	3.1	1.7	0.6	1.0
Public consumption	0.4	3.2	1.8	-0.3	0.5
Fixed investment	-0.3	1.2	5.1	-0.7	0.9
Private fixed investment	-2.9	4.6	4.7	-1.3	0.5
Public fixed investment	11.2	-12.0	6.9	2.0	2.5
Exports	-7.5	4.7	1.5	2.1	3.5
Imports	-6.6	5.3	3.5	1.0	1.8
Effect of demand components on growth					
Domestic demand	-2.1	2.7	2.5	0.1	0.8
Net exports	-0.3	-0.2	-0.8	0.5	0.7
Changes in inventories and statistical error	0.2	1.0	0.0	0.0	0.0
Savings rate, households, %	4.7	1.0	-1.0	-0.2	0.2
Current account, %, in proportion to GDP	0.7	0.7	-1.0	-0.6	0.1

f = forecast.

Sources: Statistics Finland and Bank of Finland.

Key forecast outcomes (2/2)

	2020	2021	2022 ^f	2023 ^f	2024 ^f
Labour market					
Number of hours worked	-2.5	1.3	2.2	0.3	1.0
Number of employed	-2.0	2.6	2.4	0.1	0.6
Unemployment rate, %	7.8	7.6	6.5	6.5	6.4
Unit labour costs					
Labour compensation per employee	0.4	4.4	3.4	3.8	3.0
Productivity	-0.3	0.8	-0.7	0.5	0.9
GDP, price index					
Private consumption, price index	0.5	2.0	5.6	2.3	1.8
Harmonised index of consumer prices					
Excl. energy	0.8	1.3	3.5	3.0	2.1
Energy	-5.0	9.7	26.9	-2.6	-1.5

f = forecast.

Sources: Statistics Finland and Bank of Finland.

Operating environment: assumptions and financing conditions

Russia's war in Ukraine is curbing growth in the global economy and in the Finnish economy. The war is further exacerbating supply-side bottlenecks caused by the COVID-19 pandemic and continuing to push up inflation. A rise in market rates will tighten financing conditions. Increased geopolitical tensions are clouding both the global and Finnish economic outlook. This forecast is based on data available on 24 May 2022.

Ukraine war is weakening a world economy already suffering from supply bottlenecks

Russia's war in Ukraine is undermining global economic growth because it is increasing uncertainty, exacerbating production and supply chain disruptions, and pushing up prices of raw materials, food and energy. According to the assumptions underlying the forecast, the most intense phase of the war will continue until the end of 2022. The uncertainty stemming from the war is expected to gradually decrease in the second half of 2022, but it is assumed that the sanctions against Russia will remain in force at least until the end of 2024.

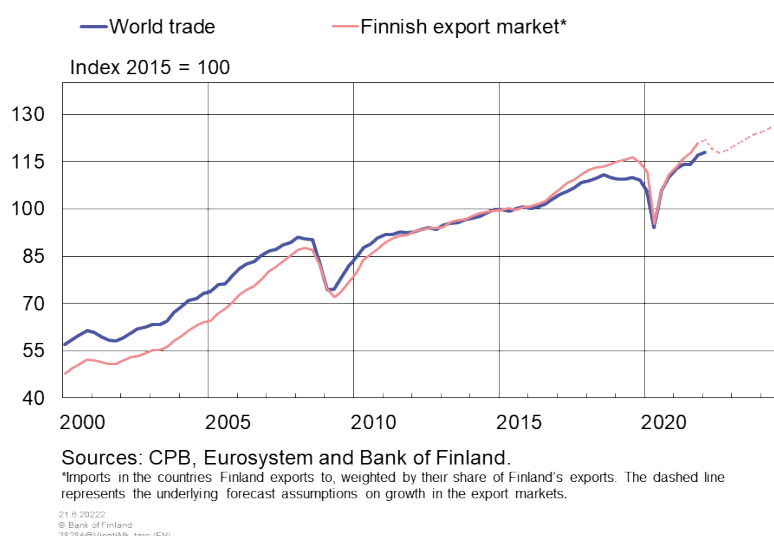
The continuation of the COVID-19 pandemic and especially China's strict restrictions on

movement will prolong supply bottlenecks and uncertainty in the global economy. The outlook for the global economy is clouded not only by the war and the pandemic, but also by increased geopolitical tensions and problems in the Chinese economy, for example its real estate sector. Global economic growth is projected to be significantly weaker in 2022 and 2023 than previously estimated, but to stabilise close to its long-term average in 2024 (Table 2).

The slowdown in world trade and the cessation of trade with Russia are reflected in the declining demand on Finland's export markets in the immediate quarters ahead (Chart 1). According to the forecast, the Russian economy will contract by around 13% in 2022 and by around 5% in 2023.

Chart 1.

Ukraine war will leave a lasting scar on Finland's export demand



According to the forecast's assumptions, problems in the supply of goods and raw materials will gradually ease and dissipate by the end of 2023. While Finland's export demand will strengthen as global economic growth picks up, it will not return to its previously projected baseline even by the end of 2024. The war will thus leave a lasting scar on Finland's economic operating environment. The duration and extent of the supply disruptions will be highly dependent on the path taken by the war and the pandemic.

Rising prices of oil and other raw materials are significantly raising production and import prices across the world (Table 2). Furthermore, the depreciation of the euro against the US dollar will raise euro-denominated prices. However, the prices of oil and other raw materials are assumed to fall in the longer term, in line with market expectations. The forecast assumes that oil imports from Russia to the EU will cease and that euro area countries will secure oil from other sources to fully replace Russian oil.^[1]

1. The alternative scenario assesses the impact on Finland's economic growth of the production constraints caused by the cessation of energy imports.

The war in Ukraine and the supply bottlenecks will have a detrimental impact on euro area foreign trade and investments, particularly in 2022.^[2] Inflation will curb economic growth. On the other hand, the ending of COVID-19 restrictions and the use of savings accumulated during the pandemic will boost household consumption in the euro area, which will, in turn, support services in particular. As a result, economic growth in the euro area will continue, although slower than previously forecast (Table 2).

Euro area inflation is projected to rise significantly in 2022, but to gradually moderate later to around 2% in 2024. Inflation has been driven up particularly by the steep rise in energy prices, although rising food prices, production bottlenecks and the recovery of services demand are also contributing to inflation. There are signs that inflation is broadening. Indeed, underlying inflation (i.e. excluding energy and food prices) in the euro area is projected to rise to just over 3% this year.

Interest rates are rising

In June, the Governing Council of the ECB decided to end net asset purchases under its asset purchase programme as of 1 July.^[3] For the present, the Governing Council will continue reinvesting, in full, the principal payments from maturing securities purchased under the APP. Additionally, the Governing Council announced that it intends to raise the key ECB interest rates by 25 basis points at its July monetary policy meeting and that another rise is to be expected in September. The calibration of this September rate increase will depend on the updated medium-term inflation outlook. The Governing Council is committed to its 2% inflation target over the medium-term, and therefore the pace at which it will adjust monetary policy beyond September will depend on the updated growth outlook and how the Governing Council assesses inflation to develop in the medium term. The interest rates on the main refinancing operations, on the marginal lending facility and on the deposit facility are currently 0.00%, 0.25% and -0.50%, respectively.

Financing conditions in Finland have so far remained mainly accommodative and supportive of growth. However, the average interest rate on new housing loans and the 12-month Euribor rate have begun to rise (Chart 2). The yield on Finnish 10-year government bonds has also clearly increased this year. Financial markets are expecting short-term interest rates to rise in the euro area in the immediate quarters ahead (Table 2). But while market expectations regarding the pace of short-term interest rate rises have increased recently, markets also expect rates to go on to stabilise next year. Current market expectations regarding the level of short-term interest rates are relatively high in relation to where these rates have been over the last decade, but even the current expectation level is moderate in any long-term comparison.

In the [Bank Lending Survey \(BLS\)](#), some respondent banks reported that credit standards and terms on corporate loans had tightened in early 2022. In the first quarter, credit standards for household loans either eased or remained unchanged on average. According to the Business Tendency Survey by the Confederation of Finnish Industries

2. More detailed information on the euro area forecast is available on the [ECB website](#).

3. More detailed information on the ECB's monetary policy decisions is available on the [ECB website](#).

(EK), financial difficulties have not become a particularly significant obstacle to output or sales over the last few quarters.

Chart 2.

12-month Euribor rate has risen rapidly

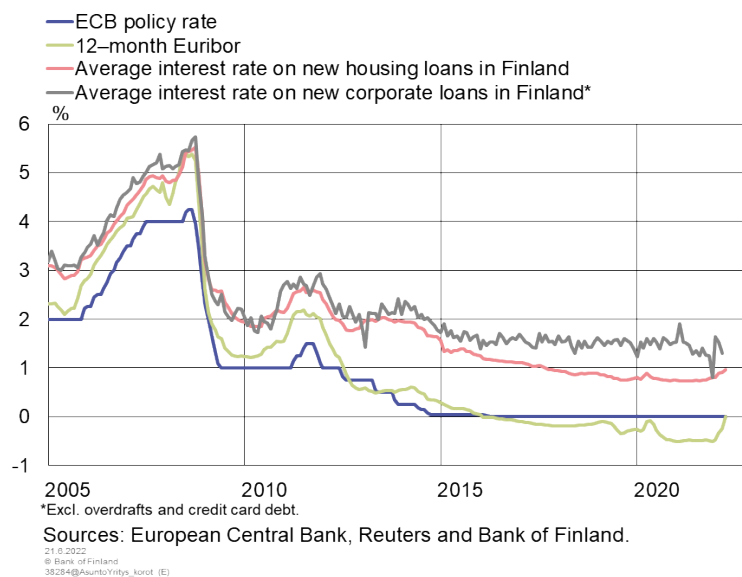


Table 2.

Forecast assumptions					
Volume change year-on-year, %	2020	2021	2022 ^f	2023 ^f	2024 ^f
Euro area GDP	-6.5	5.4	2.8	2.1	2.1
World GDP	-2.8	6.3	3.0	3.3	3.4
World trade*	-8.2	11.4	4.3	3.2	3.6
Finland's export markets, % change**	-8.3	10.5	2.0	2.2	3.5
Oil price, USD/barrel	41.5	71.1	105.8	93.4	84.3
Export prices of Finland's competitors, euro, % change	-3.8	9.9	16.9	2.9	0.8
3-month Euribor, %	-0.4	-0.5	0.0	1.3	1.6
Finland's nominal effective exchange rate ***	108.7	109.4	106.9	106.0	106.0
USD value of one euro	1.1	1.2	1.1	1.1	1.1

* Calculated as the weighted average of imports.

** 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.

*** Broad nominal effective exchange rate, 2015 = 100. The index rises as the exchange rate appreciates.

f = forecast.

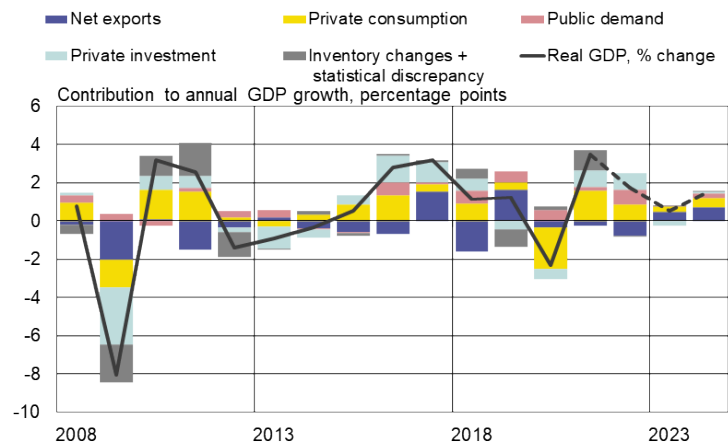
Sources: Eurosystem and Bank of Finland.

Demand and public finances

Finland's economic growth will slow down substantially this year and in 2023 as a consequence of Russia's war in Ukraine (Chart 3). The war is increasing uncertainty in the economy, which is very detrimental for private consumption and investment. High inflation is eroding the purchasing power of households and further weakening consumption, and rising costs are reducing private investment. Foreign trade is also suffering on account of the war. When uncertainty and the problems with the availability of raw and other materials ease, however, Finnish exports will gradually recover. Finland's public finances will remain very much in deficit throughout the forecast period.

Chart 3.

Economic growth will weaken this year and in 2023



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 2022–2024 are forecasts.

Sources: Statistics Finland and Bank of Finland.

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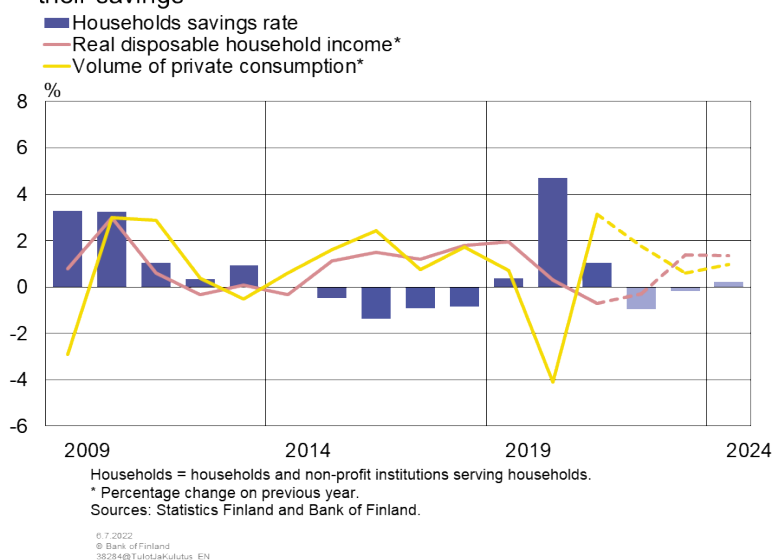
Erosion of purchasing power is slowing growth in consumption

Private consumption in 2021 grew swiftly as the economy recovered from the sudden standstill caused by the COVID-19 pandemic. This year the increase in private consumption will slow down. Rising inflation is eroding the purchasing power of households for the second year in succession, which will curb the growth in consumption. In 2023, purchasing power will start to recover as the peak in inflation passes (Chart 4).

The weakened economic outlook and high inflation undermine consumer confidence, which slumped in the spring after Russia invaded Ukraine. Combined with the uncertainty triggered by the war, this is curtailing growth in private consumption this year.

Chart 4.

Households are making up for the loss of purchasing power by using their savings



On the other hand, worries about the pandemic are fading, and the release of pent-up consumer demand this year should help boost the consumption of tourism and leisure services in particular.

Households have accumulated a considerable amount of savings during the pandemic.

Between spring 2020 and autumn 2021 Finnish households amassed an estimated total of almost EUR 6 billion in additional savings. Since then the savings rate has declined. This year especially, households will be compensating for the erosion of purchasing power by using some of their savings, which will mainly be channelled into consumption expenditure. By 2024, most of the additional savings that had been accumulated will have been spent.

Private consumption will also increase next year, but the rise will be modest as there will still be much uncertainty and the supply chain disruptions will continue. Rising interest rates over the next few years will also slow the growth in consumption. In 2024, consumption growth will gradually start to recover as the disruption to the economy caused by the pandemic and the Ukraine war gradually eases and the mood of uncertainty fades.

Investment growth will fade and retreat

The economic recovery from the pandemic and the burst of activity in housing construction resulted in a brisk increase in private investment in 2021. Robust investment growth is expected to continue in 2022 (Chart 5). Investment in industry in particular is expected to increase this year.

The war in Ukraine and rising costs, however, are causing growth in private investment to level off, and investment is expected to fall in 2023. Private investment is normally sensitive to fluctuations in economic uncertainty, although there is always a time lag involved.

Chart 5.



Private investment, however, will start to increase again in 2024, when the level of geopolitical uncertainty gradually dissipates. In the longer term, non-residential investment^[4] will be boosted in particular by the needs of the green transition and investment in energy.

Housing construction was exceptionally brisk and new housing starts were at a record high in 2021. With projects launched last year and construction work continuing, housing construction will see strong growth in the current year, too (Chart 5).

The rise in interest rates and expectations of a tightening of monetary policy are reflected in the housing market as a decline in demand on the part of consumers and investors. The unusually rapid rise in the costs of construction and disruptions to the supply of building materials will mean that new projects will be slower to start in the immediate years ahead. In 2024, housing construction will recover slightly, as the increase in costs levels off and uncertainty about the economy dissipates.

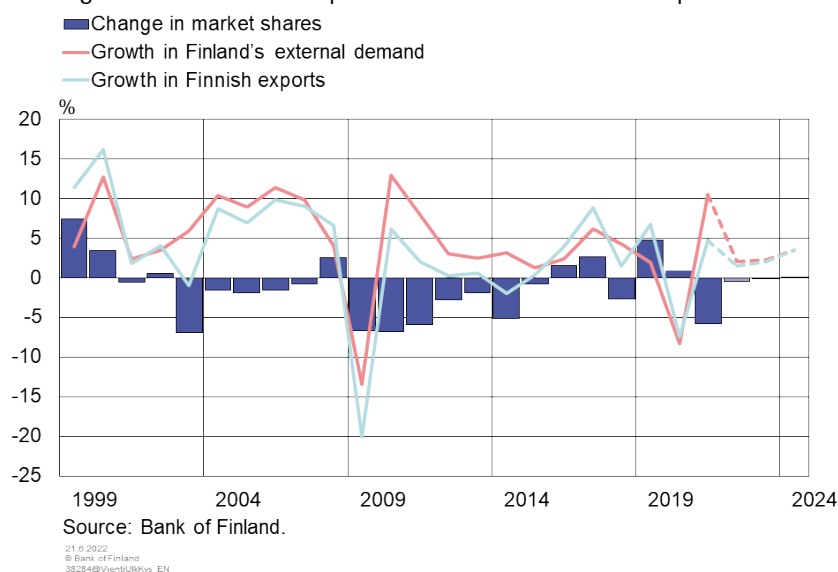
Problems in the global economy will curb export growth

Russia's war in Ukraine, the ensuing sanctions and the collapse in trade with Russia will curb growth in Finland's export markets. Moreover, global disruptions in production and supply chains will serve to weaken foreign trade further. The growth in Finnish exports will slow considerably as a result this year, but will subsequently begin to pick up slowly in the wake of rising external demand. Exports in the period 2023–2024 will increase at the same rate as the growth in Finland's export markets. The slowdown in export growth will thus be significantly less than during the pandemic (Chart 6).

Chart 6.

4. Private investment excluding residential.

Slower growth in Finland's export markets and in Finnish exports



It will take some time before companies exporting from Finland are able to adapt to the collapse in exports to Russia and to find new, alternative markets. Finding such markets will depend on various factors, such as the structure of the exports and the ability of Finnish companies to compete on costs.

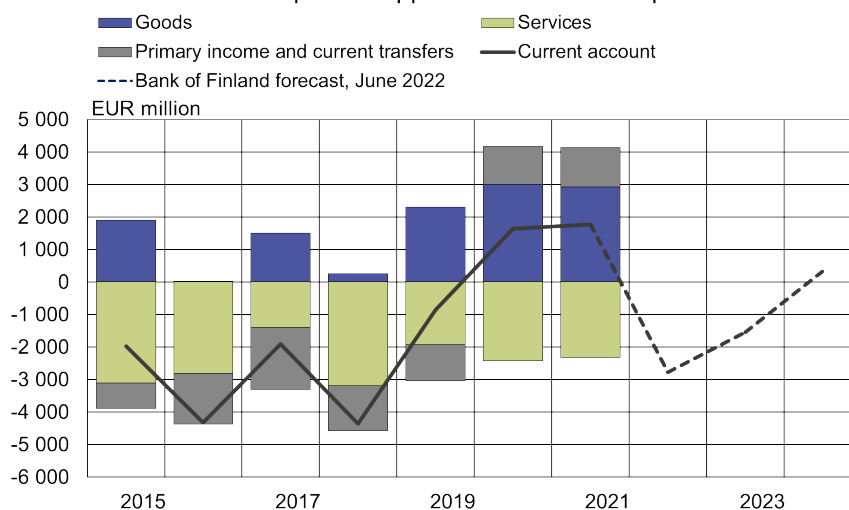
This year, imports will grow faster than exports. This is because of the slowdown in export growth caused by the decline in trade with Russia and because of the continuation in 2022 of domestic demand growth, which supports import growth. Imports from Russia will decrease mainly because of the fall in imports of energy, although these can be replaced with energy from other markets. The figure for net exports will therefore be low this year. The growth in imports will lose momentum in 2023–2024, due to weak growth in domestic demand.

Rising prices of energy and raw materials have pushed up transport costs and increased the prices of exported and imported products. The production costs of companies that export goods and services have thus risen noticeably. The terms of trade, however, have remained virtually unchanged, as companies have been able to offset the high prices of imports by charging higher prices for their exports. The terms of trade are also expected to remain stable over the forecast period.

There was a current account surplus in 2021 (Chart 7). Both the balance of trade in goods and the balance of primary income have shown a considerable surplus, largely [on account of temporary factors connected with the pandemic](#). The current account for 2022 will show a deficit, as the value of imports will increase faster than that of exports. With growth in the value of imports slowing over the immediate years ahead, the deficit will diminish and in 2024 Finland's current account will be virtually in balance.

Chart 7.

Current account surplus disappears in the forecast period



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

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Ukraine war intensifying pressures on public spending

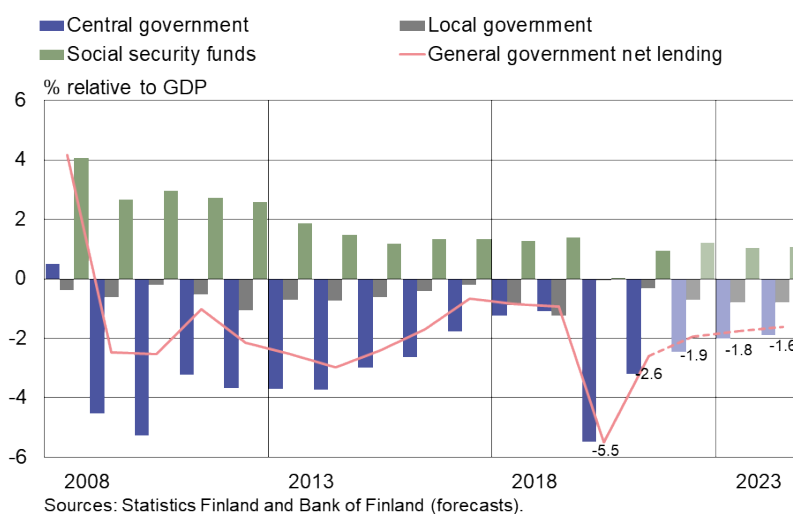
The pandemic increased the fiscal deficit and the level of public debt. Russia's war in Ukraine has triggered new public spending needs with respect to defence, the national security of supply, energy self-sufficiency and the green transition. The general government budgetary position will nevertheless show an improvement in the years following 2021, because the increase in tax revenues and social security contributions will exceed the growth in public expenditure in the forecast period.

Finland's public finances will be in deficit in the immediate years ahead, although the general government deficit relative to GDP will shrink to some extent (Chart 8). But the deficit even in 2024 will be substantially greater than before the COVID-19 crisis. The imbalance between revenue and expenditure is scarcely attributable to the business cycle, but is instead mainly structural. Fiscal policy will thus continue to be accommodative.^[5]

Chart 8.

5. The fiscal stance is assessed here with reference to the structural deficit. The fiscal stance measured in terms of the change in the structural primary balance is neutral in 2022 and will become slightly contractionary in the period 2023–2024.

General government deficit will be greater than before the pandemic



The government's tax policy is fairly neutral, which means that taxation will not change significantly this year or next. However, the measures agreed on following Russia's invasion of Ukraine will push up expenditure by almost EUR 2 billion this year, and by more than EUR 1 billion again in the period 2023–2024. Temporary additional expenditure will mainly be allocated to national defence, the reception of refugees from Ukraine, Finland's national security of supply, and Government Programme measures for improving public services.

At the same time, the rising prices of intermediate goods and construction costs are increasing public expenditure. Demands for higher wages on the part of municipal employees increase the risk of an even sharper rise in expenditure.^[6] Real public consumption will continue to increase with the agreed additional expenditure this year. State-funded investment will expedite the increase in real public investment this year, although rising costs will delay the launch of public investment projects to some extent.

Central government has carried the main burden of the pandemic-related additional expenditure. The preparedness measures agreed as a result of the war in Ukraine will also have to be paid for mainly by the government. The central government deficit will thus remain at around 2% relative to GDP in the period 2023–2024, despite the healthy trend in tax revenues and the rapid growth in GDP at current prices (Chart 8).

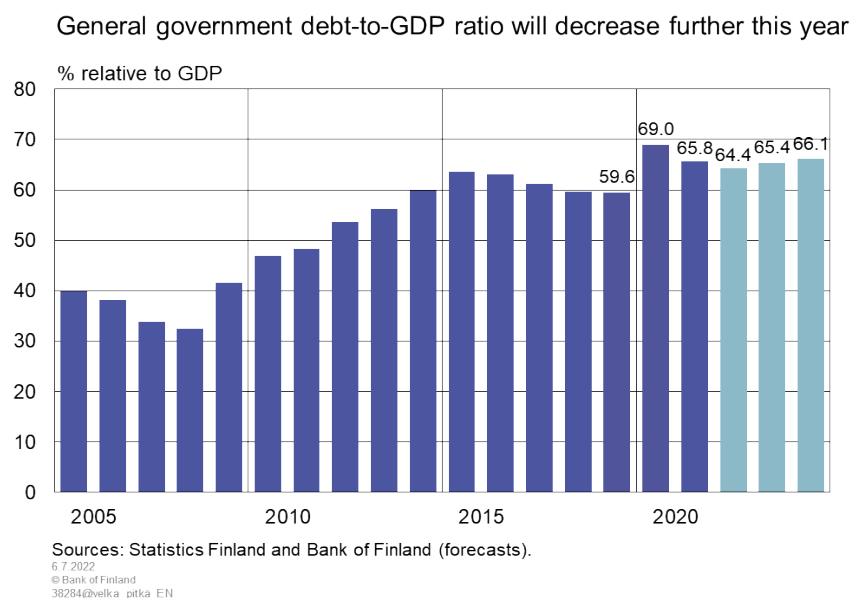
The pandemic-related financial support provided to local government by the state will diminish this year. As a result, the local government deficit will increase. There will be changes in local government in 2023, when the responsibility for social welfare, healthcare and rescue services will transfer from the municipalities and joint municipal

6. The negotiated solution reached by the municipal sector on 8 June 2022 was not known at the time of the forecast. The five-year pay increase scheme, if applied to all municipal employees, would increase the fiscal deficit by up to a few tenths of a percentage point relative to GDP, provided the assumptions in the forecast otherwise remain as before. The negotiations relate to around 425,000 employees, i.e. more than 80% of local government staff.

authorities to the new wellbeing services counties. Thus, a significant portion of local income taxation will come under state taxation, and the government will finance the wellbeing services counties through current transfers. In the forecast, the effect of these reforms on the balance between local government revenue and expenditure is neutral.

The general government debt-to-GDP ratio will decrease further this year, because GDP at current prices will increase dramatically on account of inflation (Chart 9). However, the debt ratio will start to increase as from 2023 due to the considerable general government deficit. Debt servicing costs will rise in the next few years, which will in turn accelerate the increase in the debt ratio.

Chart 9.



Supply and cyclical conditions

Russia's war in Ukraine has caused a clear downward adjustment in the assessment of cyclical conditions. As recently as December 2021, projections were pointing towards a boom, but current estimates suggest that the economy will just barely stay close to its potential growth rate for the next few years. The deteriorating economic situation is also hampering employment growth. Growth in potential output is slow due to structural factors, but investment growth is also on a more cautious path, and supply disruptions persist. The output gap will remain close to zero between 2022 and 2024.

Employment level remains good, although the war is weakening the labour market

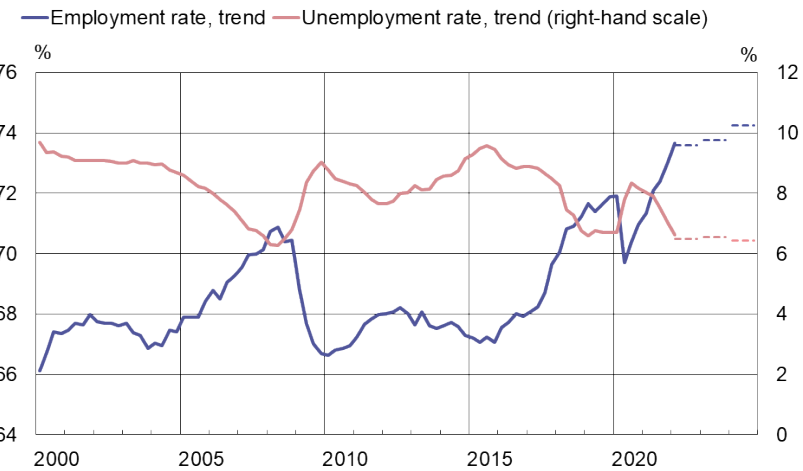
Employment has picked up rapidly, driven by the strong recovery from the COVID-19 slump. However, the deteriorating economic situation caused by the war will curb employment growth during the forecast period. The employment rate is expected to rise by just over 2 percentage points over the forecast period, to 74.4%. The number of people employed will increase, and at the end of the forecast period, in 2024, this number will

be some 82,000 higher than in 2021, on average. In 2022, the unemployment rate will be 6.7%, almost one percentage point lower than in 2021. It will decrease only slightly in the years ahead and will stand at 6.6% in 2024 (Chart 10).

Prior to Russia's invasion of Ukraine, strong growth in services demand and the lifting of pandemic restrictions gave added impetus to the continuing growth in employment over the short term, particularly in services. Unemployment has dropped, but by less than the improvement in employment. In other words, the labour force participation rate has increased. Layoffs have decreased to pre-pandemic levels.

Chart 10.

Employment level remains good, although the war is weakening the labour market



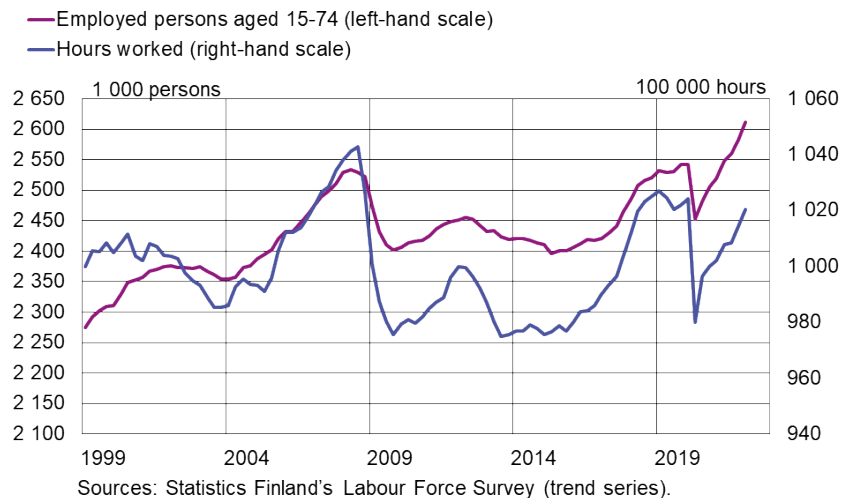
Sources: Statistics Finland's Labour Force Survey and Bank of Finland.

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Although the employment rate and the number of people employed have already exceeded pre-pandemic levels, the number of hours worked is still lower than before the COVID-19 crisis (Chart 11). This may be the result of recent growth in part-time jobs or a reduction in the average working hours of full-time jobs. The protracted pandemic and the outbreak of the Ukraine war have brought continued uncertainty to the labour market, which may have increased caution in creating permanent full-time jobs. The reduction in the average hours worked may, in part, be due to the improved employment situation for older workers who work fewer hours. This observed downward trend in average hours worked will level out towards the end of the forecast period.

Chart 11.

Number of hours worked remains below pre-pandemic levels



The number of job vacancies has risen to a record high, but growth in the number of people employed is constrained by labour market mismatches. Companies report a shortage of suitable labour in surveys. The continued good level of growth in employment and the reduction in unemployment suggest that some of the labour supply problems may be caused by labour market frictions relating to the need for rapid job creation.

The number of people unemployed for more than a year has decreased, but the number of long-term unemployed is still 30,000 higher than before the pandemic. At the same time, the number of people unemployed for more than two years is growing. The working-age population will continue to decline in 2022 and in the immediate years ahead. Consequently, growth in employment will slow towards the end of the forecast period, because by that time those who were laid off and those unemployed persons who were most easy to employ will already have found work. The unemployment rate will fall slightly below the level of structural unemployment during the forecast period.

Boom cancelled

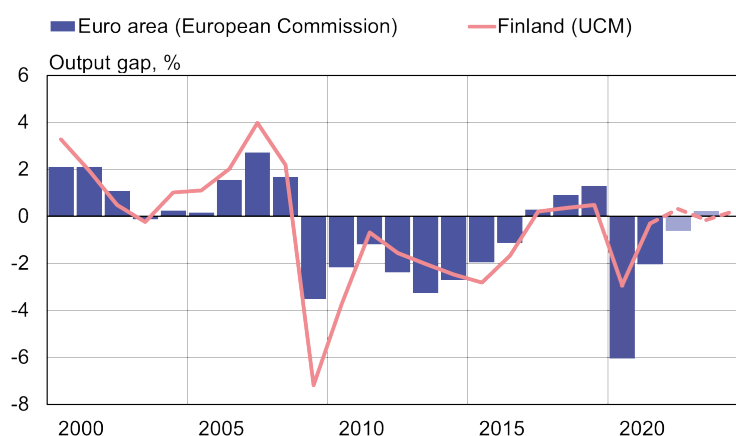
With the exception of the public finances, Finland's economy had largely recovered from the deep recession caused by the COVID-19 pandemic when the next crisis hit. Even just before Russia's invasion of Ukraine, it was projected that cyclical conditions would improve in both the euro area and Finland in the immediate years ahead. Due to the crisis caused by the war, the assessment of cyclical conditions has been adjusted significantly downwards. According to the current estimate, the output gap will be close to zero in 2022–2024 (Chart 12). However, [the threat of a recession cannot be ruled out](#) if the war in Ukraine lingers on, energy and raw material prices continue to rise and the economy adjusts only slowly.^[7]

7. The difference between GDP and potential output is referred to as the output gap and is usually expressed as a percentage of potential output. According to economic theory, a positive output gap cannot be maintained without upward pressure on wages and prices.

The war is undermining growth in the economy by affecting both demand and supply. On the one hand, the uncertainty caused by the war is weakening domestic demand and causing a contraction in export markets. On the other hand, the war is further exacerbating global supply disruptions and raising energy and other raw material prices. In addition to the geopolitical uncertainty, China's strict COVID-19 restrictions continue to hamper the functioning of supply chains, prolong shortages of raw materials and other materials and lengthen delivery times.

Chart 12.

Output gap in Finland and the euro area



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

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Finland's potential output growth was already recovering from the setback experienced during the COVID-19 crisis when Russia began its war in Ukraine (Chart 13).^[8] The growth of potential output will remain slow over the forecast period, partly due to weaker-than-projected investment growth and continued supply disruptions. GDP growth is estimated to remain close to, but slightly above, its long-term potential rate at the end of the forecast period. However, the war is creating uncertainty [in the assessment of potential output and is increasing the downside risks to the forecast](#).

The increase in long-term unemployment that resulted from the pandemic and the persisting high level of structural unemployment will reduce the importance of labour as a source of potential output during the forecast period.^[9] The labour supply will also be constrained by the fact that the working age population (aged 15–74) has already started to shrink. On the other hand, due to a positive change in the participation rate, aggregate labour input will continue to support growth in potential output.

Capital stock is growing slowly, contributing to growth in potential output. Growth in

8. Potential output is the volume of GDP when all the inputs in the economy are in normal use.

9. NAIRU is estimated to be around 7% during the forecast period.

total factor productivity will remain subdued temporarily, due to supply disruptions and reallocation of resources. In addition to the immediate shortage of components and other materials, the pandemic and the war are forcing some businesses to look for new subcontractors and reorganise their supply chains, also forcing them to ensure undisturbed access to energy.

Especially during crises, structural rigidities and frictions in the economy play an important role in how effectively economic resources are reallocated and how quickly potential output improves. In a business survey conducted by Finnish Industry Investment, [most businesses replied that they believe they will be able to replace the lost Russian exports](#) with new markets relatively quickly.^[10] However, some businesses do not expect to be able to replace lost exports at all.

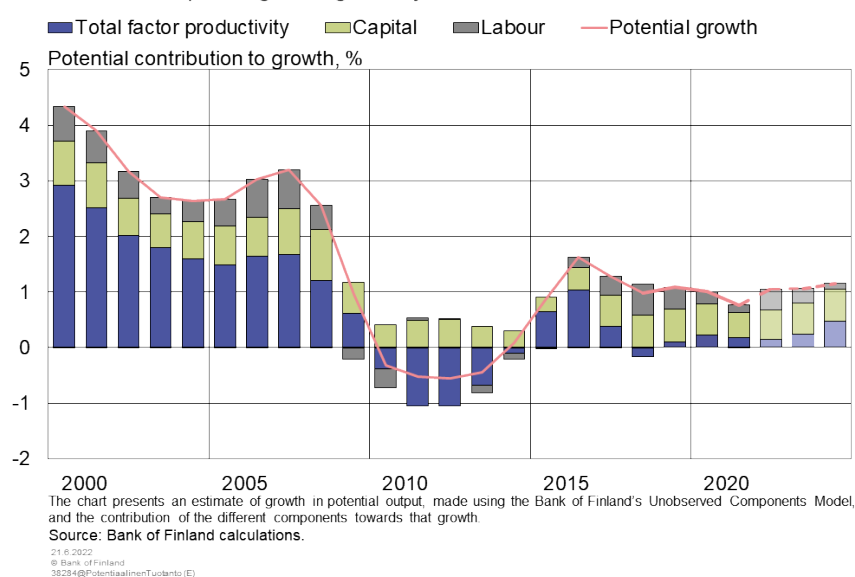
Russia's invasion of Ukraine may affect potential output in many ways, which is why the assessment is subject to more uncertainty than usual. The war may have an enduring or even a permanent negative impact on the economy's growth potential if it leads to permanently reduced international trade and a less optimal global division of labour. This would contribute to slowing down productivity growth. On the other hand, diversifying critical production chains and moving production closer to the domestic market may reduce the risk of supply disruptions and improve the crisis resilience of the economy going forward.

The relocation of production combined with green transition investments that are larger and quicker than anticipated could strengthen the capital stock. On the other hand, capital stock growth may turn out weaker than estimated if a significant volume of investments are cancelled due to the consequences of the war. Part of the capital stock may become obsolete should there be major disruptions in the availability of oil and gas. Due to the war, uncertainty also surrounds the growth in labour input, for instance in regard to future immigration trends.

Chart 13.

10. Business survey conducted by Finnish Industry Investment in April 2022.

Potential output is growing slowly



Prices and costs

Inflation, having already picked up last year, has further increased in 2022 as a result of the Ukraine war and the COVID-19 pandemic. Higher raw material prices and protracted supply chain disruptions have led to a widespread rise in consumer prices. Nominal earnings will increase notably less than inflation in 2022, resulting in an uncommon decline in real earnings. In 2023–2024, earnings are projected to grow faster than inflation, which will slow in 2023 as energy prices decline slightly. Finland's cost competitiveness is projected to improve somewhat in 2022 but will remain virtually unchanged relative to the euro area in 2023–2024.

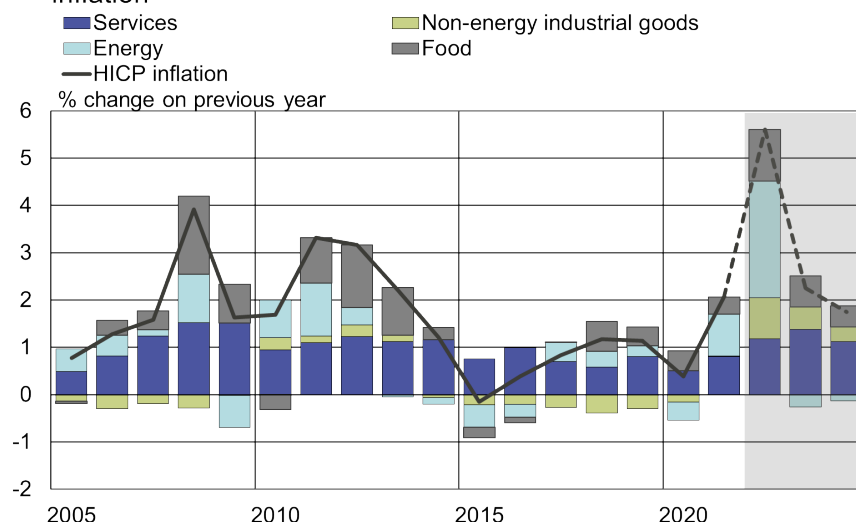
Inflation is being driven up by the effects of the Ukraine war and the pandemic

Inflation has further increased during early 2022 especially because of higher energy prices, but consumer price growth has become more broadly based in recent months (Chart 14). Russia's invasion of Ukraine has driven up energy and raw material prices even higher, and these will be passed on widely to consumer prices in 2022. Food price inflation has accelerated on the back of higher world market prices for energy, fertilisers and raw materials. Because cost factors are passed on to the prices of final goods via a time lag, food prices will continue to rise sharply until 2023.

Supply chain disruptions caused by the pandemic have persisted, and have been exacerbated by the war, which will raise consumer goods prices in 2022. These supply chain disruptions are expected to subside during 2023, and as a result the rise in consumer goods prices will gradually slow. The increase in services prices will accelerate in 2022 as the demand for services recovers and price rises for other goods are passed on to services.

Chart 14.

Supply bottlenecks and high raw material prices are pushing up inflation



Sources: Eurostat and Bank of Finland forecast.

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In 2023, inflation will be lower than this year. The upward impact of energy prices on inflation will abate in 2023, but prices of energy products will remain high. Underlying inflation, which measures price changes in consumer goods and services, will remain close to 3% in 2023. Underlying inflation will begin to fall as supply chain disruptions subside, growth in aggregate demand slows, and as market interest rates are expected to rise. Inflation will slow further in 2024, as energy prices decline in accordance with market expectations and underlying inflation eases.

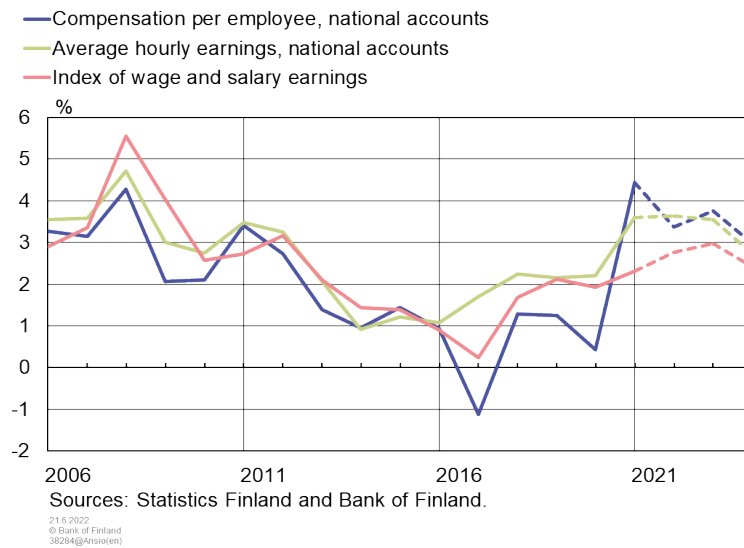
Real earnings will decline in 2022 because of high inflation

Growth in nominal earnings will rise to 2.8% in 2022, as measured by the index of wage and salary earnings (Chart 15). This forecast is based on the collective bargaining agreements that have been signed so far, in which wage rises agreed for 2022 have been about 2%. At the time of preparing the forecast, wage negotiations for workers in local government were still in progress. In many industries wage rises for 2023 will be negotiated during autumn 2022. Because of the tightness of the labour market, wage drift is expected to be higher in 2022 and 2023 than in previous years, which will accelerate nominal earnings growth.

The forecast takes the long-run observed relationship between wages and productivity as an assumption, where real wages grow at approximately the same rate as productivity. Real earnings will decline in 2022 on account of high inflation but will begin to rise towards the end of the forecast period as inflation slows.

Chart 15.

Robust growth is projected in different wage indicators throughout the 2022–2024 forecast period



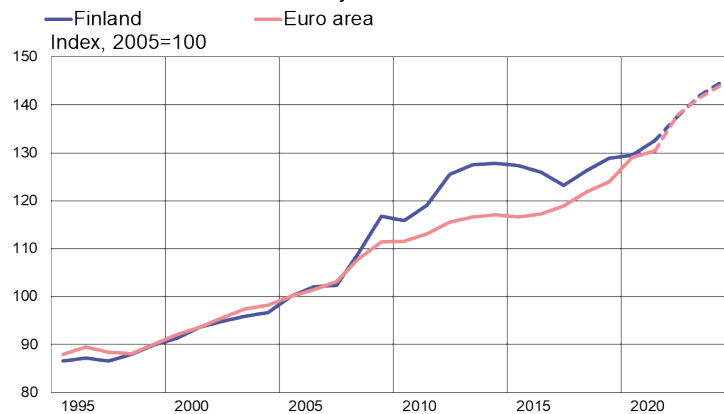
The cost of labour, or compensation per employee, will increase by 3.4% in 2022. This rise will continue at about the same pace throughout the 2022–2024 forecast period. The higher cost of labour and weak growth in labour productivity will push up nominal unit labour costs in 2022. In 2023 and 2024 labour productivity will return to growth, causing the rise in nominal unit labour costs to abate towards the end of the forecast period.

[Cost competitiveness will play an important role during the forecast period](#), especially as companies seek to make up for lost business in Russia with new export markets. Projections of aggregate unit labour costs adjusted for the terms of trade suggest that Finland's cost competitiveness will improve slightly in 2022 but remain almost the same relative to the euro area in 2023–2024 (Chart 16). Because of the war and the pandemic, projections of productivity growth are subject to significant uncertainty. In addition, the change in labour costs may differ from the projected level due to persistent high inflation. Together these contribute significant uncertainty to projections of cost competitiveness.

Chart 16.

Cost-competitiveness is not projected to change substantially during the forecast period

Nominal unit labour costs adjusted for the terms of trade



Sources: Statistics Finland, Eurostat and June 2022 forecasts by the Bank of Finland and the European Central Bank.

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Risk assessment

The risks surrounding the forecast are predominantly on the downside. There is great uncertainty associated with the forecast, especially regarding Finland's external operating environment. In private consumption and investment, however, growth may turn out to exceed expectations.

In the short term, the greatest risks concern the consequences of Russia's invasion of Ukraine, which are difficult to assess.^[11] There is a possibility of unpredictable and strong fluctuations in energy and raw material prices, and the war may also further hamper the availability of raw materials and supplies. If the war escalates further or spreads to other countries, the economic impact would be even more far reaching. The forecast takes account of the gradual cessation of Finland's export and import trade with Russia. The war will also significantly curtail growth in Finland's other export markets, especially in Europe. Export growth during the forecast years is largely dependent on how well Finnish companies manage to find new markets for their products to replace the lost Russian markets. There are also uncertainties relating to imports, particularly the availability of energy.

If Finland's NATO membership application process becomes significantly prolonged and complex, the uncertainty affecting households and companies will increase even further. Uncertainty would also grow if there were any Russian attempts to harass Finland. Increased uncertainty could leave consumption and investment growth weaker than forecast. Finland joining NATO, on the other hand, would stabilise the security policy situation, thereby reducing economic uncertainty and potentially improving growth beyond current projections, especially in investment.

In addition, the COVID-19 pandemic is still sustaining uncertainty about the direction of

11. See alternative scenario for an estimate of the war's potential impact on Finland's economy.

the global economy. In China, in particular, economic growth is further slowing due to strict restrictions. This has affected China's manufacturing and caused new bottlenecks in goods traffic, especially at ports, adversely affecting the recovery of global production chains. China's economic growth is also slowing as the rate of investment normalises, and the real estate sector is also experiencing difficulties. If growth in the Chinese economy grinds to a halt, this could lead to significantly weaker than expected growth in the world economy and the Finnish economy.

Finland might experience a new wave of the pandemic already in summer 2022, as the virus continues to spread strongly. If the capacity of the healthcare system is already under strain at that time, the situation could prompt consumers to become more cautious and, at worst, lead to new restrictions. This could cause private consumption growth to weaken below the forecast level, especially in services.

Inflation remains high worldwide and financial markets' expectations regarding the rise in euro area short rates have recently steepened. Rising inflation and increased global uncertainty may also lead to significantly increased risk premia on the financial markets. A faster than anticipated rise in market rates may curb growth in Finland's export markets more quickly than expected. High inflation and rising interest rates in a situation where companies already suffer from a weak outlook would also increase credit risks, thus further contributing to instability in the financial markets.

There is also significant uncertainty associated with Finland's short-term inflation outlook. Consumer prices could rise more quickly than anticipated, especially if international energy prices climb higher than expected. The inflation rate in Finland also depends on the level of business profitability and particularly on how successful companies are in passing on higher production costs to consumer prices. The extent of the latter may be greater than expected if energy and raw material prices remain high.

In the longer term, inflation may also be higher than forecast if wage growth is above the level anticipated. Pay rises agreed last autumn and this spring are being overtaken by inflation, and the weak development of real wages and purchasing power are increasing wage pressures for the next round of wage negotiations. Pay settlements in the municipal sector may serve as an indicator for future pay rises in other sectors as well. If wages rise more than in Finland's competitor countries, it will threaten to weaken the cost competitiveness of Finnish export industries. If the profitability of companies improves significantly despite the increased costs, wage demands could be even higher.

Residential construction characteristically reacts quickly to fluctuations in demand. In the forecast years, demand for housing will decline, particularly due to slower economic growth. At the same time, the housing market will also be cooling due to rising interest rates on housing loans, increased caution among households and diminished investor demand. As a result, the slowdown in new construction may be significantly steeper than projected.

Despite the various downside risks, the economy may perform better than forecast. The collapse of consumer confidence due to Russia's war in Ukraine may prove to be temporary, and confidence may build back quicker than expected as the situation calms down or stabilises. It is also possible that companies will be able to adapt to supply-side

bottlenecks and find new markets to make up for lost trade more quickly than expected.

Energy and raw material availability problems and their rising prices have accelerated the green transition, which will create new opportunities for Finnish companies as well. Acceleration of the green transition in Finland's export markets will increase demand for Finnish investment goods. Domestic investment in energy efficiency may also grow more rapidly than expected.

Tags

euro area, Finnish economy, forecast, public finances, employment, competitiveness, inflation, unemployment, wages

ALTERNATIVE SCENARIO

Russia's war in Ukraine could lead to a recession in Finland

Today – Bank of Finland Bulletin 2/2022 – Finnish economy



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This alternative scenario examines what impact Russia's war in Ukraine could have on the Finnish economy in the worst case. The scenario describes a situation where an escalation of the war causes the global economy to slacken more dramatically than in the baseline forecast, with weaker financing conditions, energy availability problems and exacerbated supply chain disruptions. Compared to the Bank of Finland's June 2022 baseline forecast, a deepening crisis could drive the Finnish economy into recession, at the same time accelerating inflation significantly in the immediate years ahead. Unemployment would rise as output falls.



Russia's war in Ukraine threatens to push the entire euro area economy into recession if the situation escalates and lasts longer than assumed in the baseline forecast. Restrictions on imported energy from Russia could cause energy availability problems and raise prices in both Finland and the rest of the euro area.

Compared to the [baseline forecast](#), this alternative scenario features greater disruption in

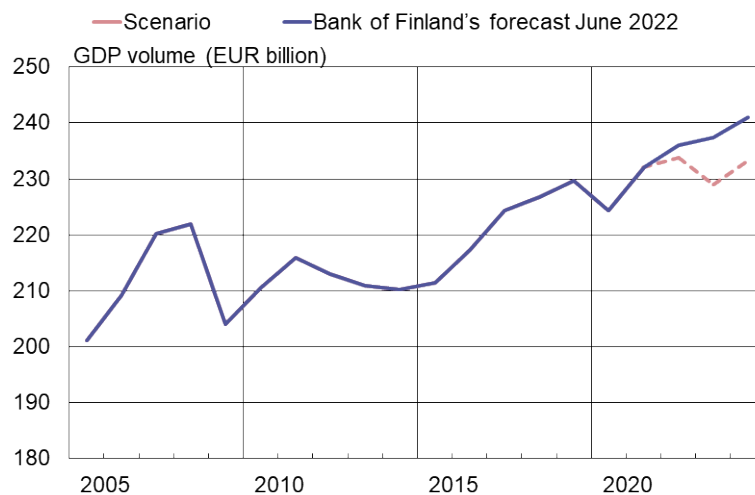
energy availability, and a higher and more prolonged increase in raw material prices. In addition, the substantial slowdown in economic growth in the euro area under the alternative scenario will weaken the Finnish economy more than in the baseline forecast. The assumption is also made that financing conditions will become tighter and interest rates will rise.

The scenario also includes greater uncertainty and a slower adjustment of the economy. All of this will mean that in the immediate years ahead Finland will be driven into recession, accompanied by a significant increase in inflation. The alternative scenario also assumes that the war could result in a prolonged contraction in Finland's export markets and disruptions in the energy supply, leading to a fall of 2% in Finland's GDP in 2023. In other words, economic growth in 2023 would be 2.5 percentage points less than in the baseline scenario.

The alternative scenario was built using [the Bank of Finland's Aino model](#).

Chart 17.

Alternative scenario's deepening crisis drives Finland into recession



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

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Decreased dependence on imported energy from Russia

Finland's dependence on imported energy products from Russia has diminished in recent years. Since the start of the war, imports of energy from Russia have been in steep decline. Finland has imported not just crude oil from Russia, but also gas, electricity, coal and considerable volumes of refined fuels and other energy products. Energy from Russia is used both in industry and by households. Imported energy is needed especially for the processes used by the forest and chemical industries, both major sectors in Finland. The metal and food industries are also to some extent dependent on imported energy.

If industrial users' access to energy were to be impeded, this could lead either to temporary standstills in production or, in the worst case, permanent closures. This would be the case in particular if the shortfall in imported energy could not be made up through the use of domestic energy sources or by importing energy from other parts of the world. Disruptions in production and curtailed economic growth would follow.

Finland's dependence on Russia for energy has diminished in recent years and months, which eases the direct harm resulting from sanctions and the ending of energy product imports. Most of the goods imported by Finland from Russia are energy products. According to statistics from Finnish Customs, Finland's imports of energy products from Russia in 2021 were worth approximately EUR 5 billion, of which EUR 3.7 billion accounted for unrefined fuels and lubricants. Finland's imports of goods from Russia in 2021 accounted for around 12% of all its imported goods. In 2021, Russia accounted for 5.4% (or EUR 3.7 billion) of all Finnish exported goods.

The figures for recent months suggest that imports from Russia have decreased further. According to statistics from Finnish Customs, the value of imports from Russia roughly halved in April compared with February. Much of this is explained by the reduction in imports of crude oil and oil products. In February, imports of mineral products (meaning crude oil, coal, oil products, natural gas and electricity) were worth EUR 619 million. In April the figure was EUR 277 million.

The war could weaken the economic operating environment in Finland more than anticipated

In the alternative scenario, the economic disruption affecting the euro area is assumed to be greater and more prolonged than in the baseline scenario (Table 1). The assumption is made that economic sanctions and ever greater difficulties with production and in supply chains will cause problems for international trade. In addition, supplies of energy from abroad will be disrupted and some energy and refined energy products will simply be unavailable.

Table 1.

The scenario: basic assumptions and transmission channels

		Transmission channels			
	Duration of tensions	Foreign trade	Energy and raw materials	Uncertainty	Financial markets
Baseline forecast	War's most intensive phase continues until end of 2022	Disruptions in trade with Russia	EU-imposed gradual ban on crude oil imports; all crude oil obtainable from elsewhere	Heightened uncertainty begins to fade after mid-2022	
	Sanctions kept in place until 2024	Disruptions to global supply chains	Short-term rise in crude oil and gas prices; market expectations of falling prices in longer term		
Scenario	War drags on and intensifies until 2023	Major disruptions to trade with Russia, including boycotts of Russian products	EU imports of Russian energy end; not all can be replaced immediately	Increased uncertainty escalates in Finland and other countries in late 2022	Uncertainty pushes up interest rates
	Additional sanctions in place until 2024	Major disruptions to global supply chains	Prolonged rise in energy costs		
	Geopolitical tensions continue until 2024	Abandoning Russian energy causes production disruptions that only ease in mid-2023	Food raw materials (incl. grain) suffer supply disruptions and prolonged price rises		

In this scenario, the war's escalation and the energy availability problems will affect the euro area economy significantly and, as a result, Finland's export markets too, which will

contract considerably (see *downside scenario in Eurosystem macroeconomic projections*). The scenario also makes the assumption that companies will in the main not immediately be able to find replacement markets elsewhere.

In addition, the growth in Finland's export markets comes to a halt in 2022 and contracts significantly in 2023. However, the export markets starts to recover at the end of the forecast period, when supply disruptions and uncertainty begin to fade. The effects of an escalation in the war and the problems of energy availability, however, will be prolonged, and the export markets in 2024 will continue to be around 5% smaller than in the baseline forecast, in spite of the partial upturn in global demand.

The war is assumed not to extend beyond Ukraine, but it is assumed to escalate and to be protracted, with geopolitical tensions not starting to ease until 2024. The scenario also assumes increased uncertainty, tighter financing conditions and higher interest rates as a result of bigger risk premia.^[1]

The scenario makes the assumption that imports of oil and gas from Russia will end completely, but that it will nevertheless be possible to acquire most of the energy and refined energy products from other markets or replace them with other energy sources. However, this will become more difficult if all the other countries in the euro area are also urgently and simultaneously seeking to acquire replacement energy products in global markets.

The scenario makes the assumption that crude oil imported from Russia can be completely replaced with other oil grades, such as North Sea Brent Crude. For example, Neste Oyj has stated that it was able to replace 85% of the crude oil it imports from Russia by the start of April and the rest will be replaced soon. However, some gas and refined energy products cannot be fully replaced any time soon. Altogether, it is assumed that some 5% of imported energy will not be replaced in the short term. This corresponds to around EUR 500 million at 2021 prices and it is estimated that this will decrease total output by approximately 0.4%.^[2]

The reduced availability of energy products will push up the global prices of crude oil and other raw materials to a level significantly higher than in the baseline forecast (Table 2). The prices of competitors' exports will also increase faster. The substantial rise in the prices of crude oil and other raw materials will be reflected, after a time lag, in higher global prices generally, which will surge higher especially in 2023.

The scenario also includes the assumption that emergency energy stocks will not be used to compensate for the shortfall in supply caused by the decrease in energy imports. But if emergency stocks were to be used to boost supply, the detrimental effects would be

1. The assumption is that uncertainty in the second half of 2022 will correspond to ¾ of the level of uncertainty felt during the worst phase of the COVID-19 pandemic. Interest on company borrowing is expected to increase by an average of just under one percentage point above that assumed in the baseline forecast.

2. To assess the direct impact, calculations of the impact on the Finnish economy of disruptions to the energy supply were made using the VATTAGE model. (Juha Honkatukia (2022): *Kansantalouden kestävyiden haasteet 2020-luvulla* (in Finnish). In: Sodan usvaa. Finnish National Defence University. Department of Warfare. Publication series 2: Research reports no. 18 ISBN 978-951-25-3286-8)

smaller.

Table 2.

External assumptions made in the scenario

Scenario's external assumptions		2021	2022 ^f	2023 ^f	2024 ^f
Export markets (%)	Baseline forecast	10.5	2.0	2.2	3.5
	Scenario	10.5	-0.2	-2.5	5.1
	Deviation*	0.0	-2.2	-4.7	1.7
Competitors' export prices (%)	Baseline forecast	10.6	14.2	2.2	0.8
	Scenario	10.6	15.3	4.5	0.0
	Deviation*	0.0	1.1	2.4	-0.8
Crude oil (\$)	Baseline forecast	70.5	105.1	92.8	83.7
	Scenario	70.5	131.9	142.2	112.8
	Deviation**	0.0	26.8	49.4	29.0
Raw materials (%)	Baseline forecast	44.9	6.2	-5.9	-4.0
	Scenario	42.1	16.7	3.7	-2.9
	Deviation*	-2.8	10.6	9.7	1.1

Scenario: The crisis will deepen and Finland will be driven into recession. Baseline forecast: Bank of Finland June 2022 forecast trajectory.

* Deviation in percentage points.

** Deviation in dollars.

f = forecast.

Sources: ECB and Bank of Finland.

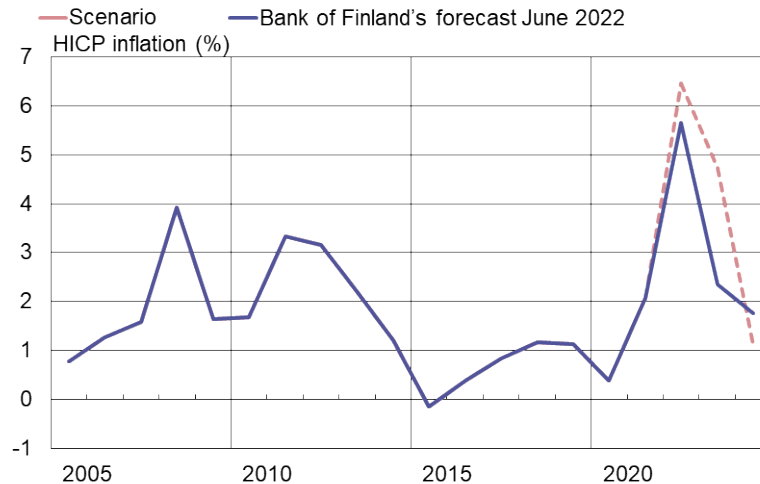
Finnish economy will contract in 2023

The long-term difficulties in export markets and the disruption of energy supplies together with a sharp rise in prices and increased uncertainty will drive the Finnish economy into recession, according to this alternative scenario. GDP growth will slow to 0.5% in 2022, and GDP will shrink by 2% in 2023 (Chart 1). In 2024 the economy will start to recover and GDP growth will return to 1.8%. Despite the recovery, the effects will be long lasting, because output in 2024 will still be more than 3% below the baseline forecast. The loss of GDP in the period 2022–2024, compared with the baseline forecast, will amount to EUR 18 billion. Unemployment will also increase, but will begin to fall in 2024 as the economy starts to grow again (Table 3).

Under the alternative scenario, inflation will accelerate to 6.5% in 2022 and remain high at 4.7% in 2023, so the erosion in household purchasing power will be significantly greater than in the baseline forecast. However, inflation will eventually start to return close to the 2% target, as the price of energy normalises and overall demand slackens.

Chart 18.

Inflation will rise considerably in the period 2022–2023 and slow down in 2024



Inflation measured by the Harmonised Index of Consumer Prices (HICP).

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

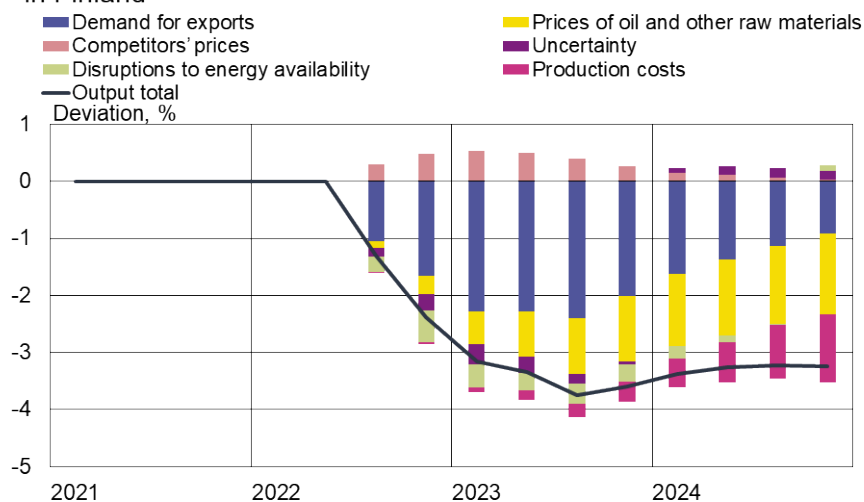
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Inflation will accelerate in 2022, mainly as a result of the sharp rise in the prices of energy and raw materials and disruptions in energy availability (Chart 18). The increase in the cost of energy and raw materials will push up the prices of imported goods, which in turn will affect the domestic prices of intermediate goods and end products. In 2023, inflation will continue to be significantly higher than in the baseline forecast. The fall in energy and raw material prices in 2023 and 2024 will bring down inflation, as measured by the Harmonised Index of Consumer Prices (HICP), to about 1% in 2024. Underlying inflation, which does not include changes in energy and food prices, will nevertheless be around 2% in 2024.

The contraction in Finland's export markets in the scenario will clearly be the biggest problem for the Finnish economy (Chart 19). Exports will decrease significantly as export markets decline, and it will not be possible to compensate for this by exporting elsewhere in the short term. Furthermore, the surge in energy and raw material prices will reduce output significantly. The sharp contraction in export markets and the rise in inflation together with increased uncertainty will have the effect of reducing investment and household consumption.

Chart 19.

Sharp fall in external demand will be key contributor to reduced output in Finland



The chart shows which structural factors result in a fall in output as calculated using the Aino model. The result is shown as a deviation (%) from the Bank of Finland June 2022 forecast. The uncertainties in the chart include a tightening of financing conditions and a rise in risk premia.

Source: Bank of Finland.

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The direct effect of the energy availability problems on output will be at its greatest in 2022 and 2023 (Chart 19). This will start to ease at the end of 2023 as energy is acquired from other sources.

The increased uncertainty under this scenario will be transmitted to the Finnish economy mainly via two channels. Wariness on the part of households will dampen consumption growth, and businesses will show greater caution when it comes to investment. At the same time, loan rates are expected to increase, as the risk premia go up and financing conditions become tighter. Imports will also fall significantly in 2023 with the decline in consumption and investment.

The prices of exports from competitor countries will rise slightly, which will help boost the exports of Finnish companies and, consequently, output. It is assumed in the scenario that the increase in labour costs will be about the same as in the baseline forecast. Output will therefore fall slightly more compared with a situation where the rise in labour costs would be dampened by negative shocks that were more serious than expected (Chart 19).

Clearly there is much uncertainty associated with how the war will play out and its effects on the economy. Of course, no one knows how long Russia's war will last. It is also uncertain whether there will be disruptions to energy imports, and if so, how long they would last. Nor is it clear when and to what extent a shortfall in energy imports could be replaced, or how quickly new export markets might be found. However, the direction of the war's impacts on the economy is clear. The war in Ukraine is curbing economic growth and driving up inflation both in Finland and the rest of the euro area.

Table 3.

Scenario results

Effect of a deepening crisis on the Finnish economy					
		2021	2022 ^f	2023 ^f	2024 ^f
Gross domestic product, annual growth (%)	Baseline forecast	3.5	1.7	0.5	1.5
	Scenario	3.5	0.7	-2.0	1.8
	Deviation**	0.0	-1.0	-2.5	0.3
Unemployment rate (%)	Baseline forecast	7.6	6.5	6.5	6.4
	Scenario	7.6	6.7	7.6	7.4
	Deviation**	0.0	0.2	1.1	0.9
Inflation* (%)	Baseline forecast	2.1	5.6	2.4	1.8
	Scenario	2.1	6.5	4.7	1.1
	Deviation**	0.0	0.8	2.4	-0.6

Scenario: The crisis will deepen and Finland will be driven into recession. Baseline forecast: Bank of Finland June 2022 forecast trajectory.

* Harmonised Index of Consumer Prices.

** Deviation in percentage points.

f = forecast.

Sources: Statistics Finland and Bank of Finland.

Tags

uncertainty, forecast, energy, scenario, GDP, recession, inflation, oil

Finnish household debt accumulation follows economic cycle

Today – Bank of Finland Bulletin 2/2022 – Finnish economy



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Over recent decades, Finnish households have constantly accumulated debt in relation to their income. The household savings rate has also been mainly negative. However, during recessions households typically save more and accumulate less debt than in economic upswings. Despite the low savings rate and continuous growth in debt, the value of the household sector's financial wealth has increased faster than the value of its debts. This is attributable to a considerable appreciation in the value of financial assets. As a consequence, the household sector's financial position has strengthened in spite of the accumulation of debt, resulting in an overall improvement in households' financial room for manoeuvre. However, asset prices can decrease substantially in a downturn, which would weaken the financial position of households and limit their borrowing capacity.



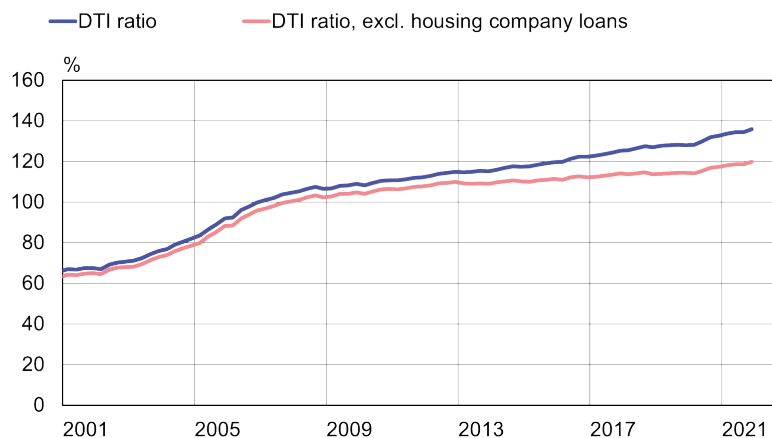
Household debt accumulation has persisted a long time

The ratio of household debt relative to disposable income, i.e. the household debt-to-income (DTI) ratio, has more than doubled since 2000, rising from 63% to 136% (Chart

20). Households' loan debt also includes their actual share of the loans their housing company has taken out. Housing company loans have markedly pushed up the household DTI ratio over the past ten years. Taking only personal loan debts into account, the DTI ratio was 120% at the end of 2021.

Chart 20.

Households have continued to accumulate debt



Source: Statistics Finland.

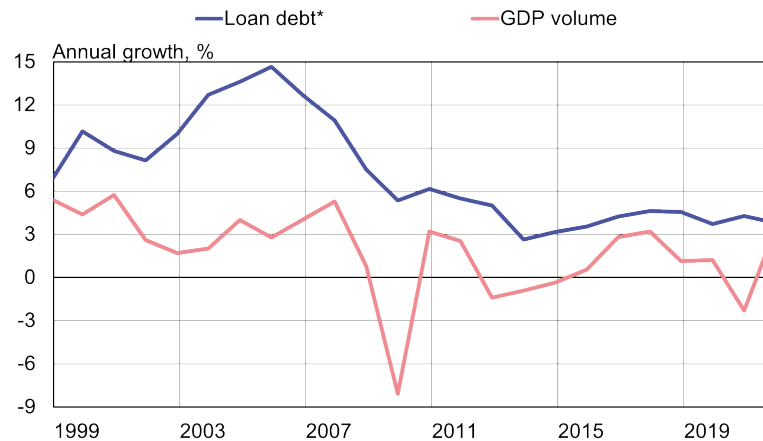
Household debt-to-income (DTI) ratio is calculated as the ratio of loan debts to annual disposable income. Includes households' housing company loans.

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The pattern of household debt accumulation follows the economic cycle. Loan debt has, on average, grown rapidly during economic upswings and more moderately during recessions (Chart 21). This could be explained by many factors. Growth in household indebtedness is, at least to some extent, limited by the level of income growth. Households can borrow more when economic conditions are favourable and incomes increase at a rapid pace. In addition, changes in asset prices in line with economic cycles can limit households' borrowing capacity, as collateral values typically rise in upswings and fall in recessions.

Chart 21.

Households have accumulated debt particularly during economic upswings



Source: Statistics Finland.

* Including households' housing company loans.

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The general observation globally and in Finland is that banks often relax their lending standards in good times and tighten them in bad times. In upswings, banks may grant longer loans, accept riskier collateral and provide loans even to applicants with relatively weak creditworthiness. In recessions, in turn, banks are more cautious. Households can also be more cautious in downturns and recessions, and may not be as tempted to take on debt as in good times.

In upswings, debt growth is typically curbed by tightening monetary policy and rising interest rates. In recessions, in turn, monetary policy is more relaxed and interest rates lower, supporting households' borrowing capacity and ability to fund purchases and investment. In short, monetary policy smooths the cyclical fluctuations in indebtedness. Euro area monetary policy has been very accommodative since the financial crisis, and interest rates have long been very low. Loan servicing costs have therefore been historically modest relative to household income, which has contributed to making borrowing attractive. At the same time, it appears that the very low level of interest rates has not fuelled household indebtedness overall to any great extent. Debt has continued to grow at a fairly stable rate in recent years compared with the period before the financial crisis (Chart 21). On the other hand, if interest rates had been higher, this would likely have further slowed the growth of debt.^[1]

Households borrow less and save more in recessions

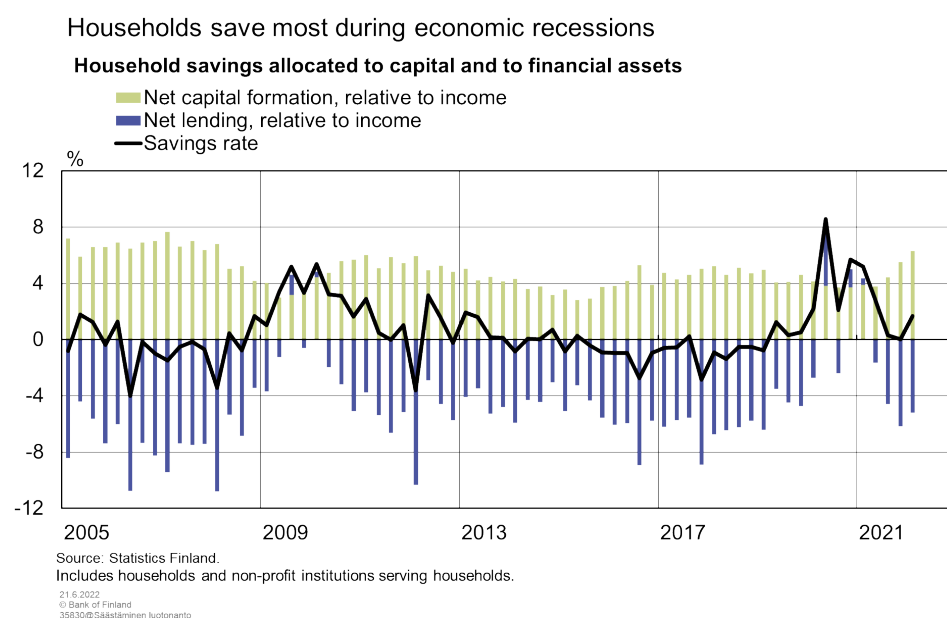
Households can invest their savings either in tangible assets (e.g. housing, natural

1. Loan-specific data collected jointly by the Bank of Finland and the Financial Supervisory Authority shows that the median size of new housing loans relative to the income level of the borrower has grown significantly in recent years. This means that the debt-servicing capacity of housing loan borrowers is also more sensitive to changes in interest rates and income. See [New housing loans keep growing in size – increased share of longer-than-usual loans](#).

resources and valuables) or in financial assets (such as deposits, fund shares or equity shares). Household saving can also be negative, meaning consumption expenditure by households exceeds their disposable income. In such cases, the difference must be financed either by credit or by realising assets. Net lending refers to the accumulation of financial assets after deduction of the financial liabilities accumulated.

Since the turn of the millennium, households have invested an average of 5% of their disposable income (taking into account consumption of capital) in accumulating tangible assets – mostly housing (Chart 22).^[2] At the same time, households have constantly accumulated more debt than financial assets. Consequently, the household sector has been a net borrower in recent decades. Only in recessions – during the financial crisis and the COVID-19 crisis – have households accumulated more financial assets than debt. The household savings rate has also been positive during these recessions.

Chart 22.

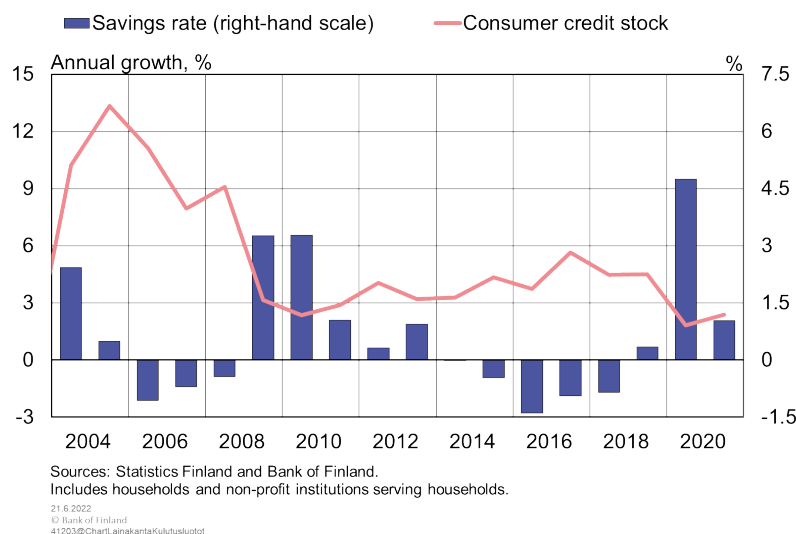


The Bank of Finland's statistics on monetary financial institutions provide data on the purposes for which banks operating in Finland grant loans to households. These statistics show that the stock of consumer credit granted to households has grown particularly rapidly when the savings rate has been negative (Chart 23). This suggests that households have partly financed their consumption expenditure with debt. Growth in the stock of other debt items (housing loans and other loans) is not similarly linked to movements in the savings rate.

Chart 23.

2. In the National Accounts, capital formation also comprises acquisitions of existing dwellings in housing companies and real estate. At the level of the aggregate household sector, however, sales of existing dwellings do not increase the capital stock (except for the amount of brokerage expenses and transfer tax, which are accounted for in the value of the capital stock). Renovation of existing dwellings and real estate, in turn, increases the stock of capital.

Low household saving is linked to growth in stock of consumer credit



Besides debt, households also hold considerable amounts of financial wealth. The net financial assets of households, i.e. the difference between financial assets and financial liabilities, have increased continuously. At the end of 2021, households' financial assets totalled almost EUR 420 billion, as compared with liabilities of EUR 205 billion. Hence, the value of financial assets was over double the value of liabilities.

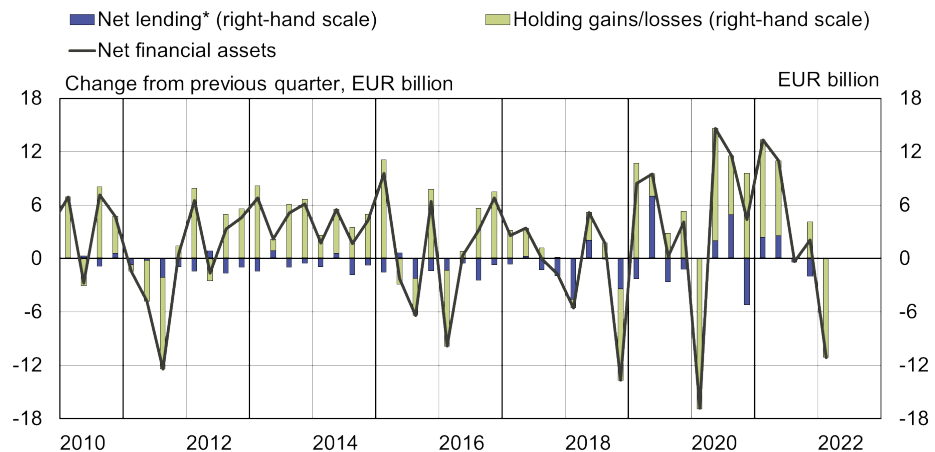
The strengthening of the financial position irrespective of continuous net borrowing reflects the appreciation of asset items, i.e. holding gains (Chart 24). Holding gains have been significantly higher on average than net borrowing, which has made it possible for households to continuously accumulate debt.

Holding gains are, however, sensitive to cyclical fluctuations. The financial position may deteriorate rapidly in downturns, which is likely to weaken households' borrowing capacity. By contrast, a solid financial position provides a financial buffer for the aggregate household sector, although there can be [marked differences in the positions of individual households](#).

Chart 24.

Large holding gains strengthen household sector's financial position

Movements in the value of households' net financial assets



Source: Statistics Finland.

* Net lending corresponds to the financial accounts concept of 'financial transactions (net)'. It is calculated as the difference between the net accumulation of financial assets and liabilities.

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Growth in loan stock tracks income and interest rate dynamics

According to the Bank of Finland's forecast produced using a new loan stock model, the stock of loans granted by monetary financial institutions to households will continue to expand in the immediate years ahead, albeit at a relatively moderate pace.^[3] The moderation is explained by the fact that income growth will slow and market interest rates will rise by 2024 (Chart 25).

Chart 25.

3. The household loan stock forecast is based on data available on 24 May 2022. For a description of the loan stock model, see [A model for predicting Finnish household loan stocks](#).

Growth in the stock of household loans slows when income growth slackens and interest rates rise

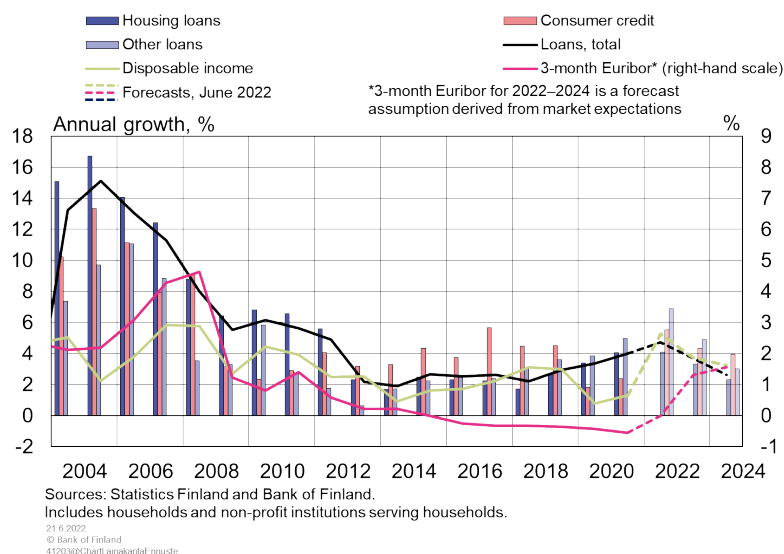
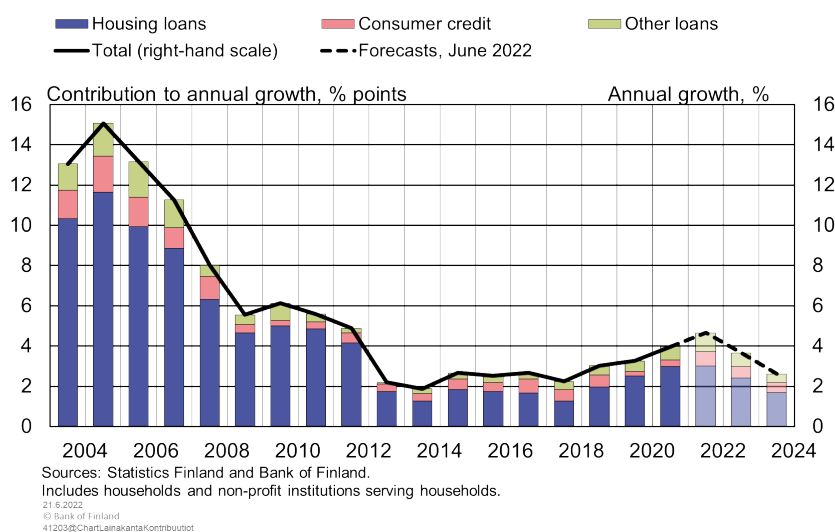


Chart 26.

Growth in household loans in immediate years ahead to stem more notably from consumer credit



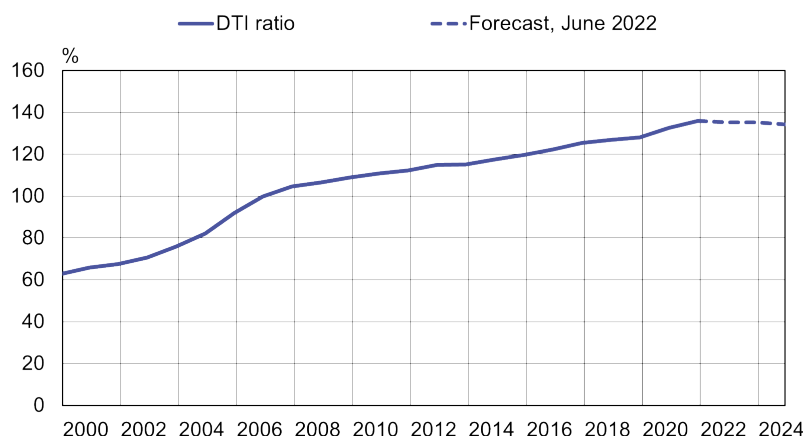
The COVID-19 pandemic has reshaped the composition of household debt. Prior to the pandemic, the stock of consumer credit expanded at a brisk annual pace, and consumer credit made a significant contribution to the growth in the aggregate stock of household loans. At the same time, the housing loan stock grew fairly modestly (Chart 26). The growth rate in the stock of consumer credit began to edge down in 2020, when the economy drifted into a recession and private consumption contracted. Last year, the growth in the stock of consumer credit came to a complete halt and the growth rate in the housing loan stock strengthened, as the pandemic resulted in households strongly shifting consumption from other consumption to housing.

During the forecast period, the stock of consumer credit is expected to resume relatively

brisk growth, on the back of an increase in consumption expenditure due to high inflation.^[4] Overall, household debt will grow roughly in step with income, as growth in the housing loan stock will abate in the next few years in response to the cooling of the housing market. Thus, the household DTI ratio is projected to stabilise (Chart 27).

Chart 27.

Household indebtedness will stabilise in the immediate years ahead as the housing market cools



Sources: Statistics Finland and Bank of Finland.
Debt-to-income (DTI) ratio is calculated as the ratio of the stock of household loan debts to nominal disposable income.

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Conclusion

Finnish households have accumulated debt in recent decades, irrespective of the cyclical situation. At the same time, the financial position of households has improved due to an appreciation in their financial wealth.

Growth in the stock of household loans has typically picked up and the household savings rate has declined during upswings, while the opposite has been the case in downswings. This suggests that households are more cautious during downswings, borrowing less and saving more. Households can also be subject to various credit constraints that bind their borrowing capacity to income growth, asset price fluctuations and overall cyclical conditions.

In the immediate years ahead, the stock of household loans is expected to grow at about the same rate as disposable household income. Consumer credit growth will outpace growth in housing loans, as high inflation fuels household consumption expenditure and the housing market cools. However, a more moderate level of income growth and a rising level of interest rates will curb the growth in loans.

4. Growth in essential consumption expenditure may lead to a particularly sharp reduction in indebted households' room for manoeuvre financially. See [Weakening economy and tightening financing conditions pose a challenge to financial stability](#).

Tags

[economic cycles](#), [saving](#), [debt accumulation](#), [households](#)

Ukraine war is weakening the business environment in Finland

Today – Bank of Finland Bulletin 2/2022 – Finnish economy



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The war in Ukraine is affecting industrial sectors and individual companies across Finland, though in an uneven manner. The results of a business survey show that the majority of companies believe they can replace relatively quickly the lost volume of exports to Russia with new markets. Some companies, however, stated that they will be unable to replace any of the lost volume of exports. Manufacturing industries, in particular, are suffering from supply chain problems and rising costs. Companies estimate that they will be able to compensate for the impact of higher costs on profitability by, for example, raising their sales prices. As a consequence of the war, companies' investments, too, will remain slightly below the level planned.



In early 2022, Finland's economy had largely recovered from the shock caused by the COVID-19 pandemic. Russia's invasion of Ukraine then weakened the operating environment of many Finnish companies once again. The economic impacts of the war are not limited to the contraction of Finland's foreign trade with Russia, however. Before the war, some Finnish companies had extensive production or business activities in Russia, Belarus or Ukraine. With the war breaking out, companies have had to abandon most of their business operations. Energy prices have risen and raw material imports from Russia are drying up, which has pushed up the costs for companies and has created supply bottlenecks. As a result of the increase in general economic uncertainty,

companies have had to consider their investments more closely. However, the war in Ukraine is affecting industries and individual companies in Finland in very different ways. Service industry companies, in particular, suffered from the COVID-19 pandemic, but now particularly manufacturing industries are hit by the contraction in turnover and rising costs.

This article assesses the impact of the war in Ukraine on companies' near-term outlook for turnover and for their supply chains, and the extent to which companies are able to adapt to the situation by looking for new markets for their products and adjusting their production. The estimate of the financial situation and outlook for companies in the early part of the year is based on business survey data compiled by Finnish Industry Investment Ltd (Tesi) in April 2022. The survey looked at 630 Finnish small and medium-sized enterprises (SMEs) with 5–250 employees. Finnish Industry Investment has conducted business surveys since the outbreak of the COVID-19 pandemic, and the survey in April was their sixth. It was targeted at three main industries: manufacturing, accommodation and food service activities, and information and communication. The survey sample is representative of the three industries in question, but the results of the survey cannot be extrapolated beyond these industries.

The survey data was combined with the companies' financial statements data for 2020. As a result, the statistical key figures calculated from the survey (mainly averages) could be weighted by turnover, exports or number of staff, thus avoiding giving too much prominence to smaller companies.^[1]

Weaker outlook for companies

In the surveys conducted in December 2021 and April 2022, companies were asked to estimate their turnover for 2022. In all three industries, companies on average expected an increase in turnover at least in nominal terms (Chart 28).

Significant differences emerged between the industries and between companies within each industry in terms of their expectations and the way in which these changed. Growth expectations were highest in accommodation and food service activities, where the average of growth expectations, weighted for turnover, reached some 25% in April. In information and communication industry companies, growth expectations were about half of that. The weakest expectations were reported in manufacturing, where nominal turnover was expected to grow by just over 3% on the previous year. The expected growth in turnover includes the impact of higher prices, and at the time of the survey, inflation was projected to be high in 2022. A significant share of the slow growth in turnover expected by manufacturing companies was attributable to the fact that companies will pass the higher costs on to prices, which may lead sales volumes to shrink, despite growing turnover.

The changes in growth expectations in each of the industries clearly reflected the changes in the global situation between December and April. In accommodation and food service

1. Financial statements data for 2020 were not available for all the companies in the sample, and so the calculation of weighted figures does not include all observations.

activities, expectations for growth in turnover improved clearly compared with December. In late 2021, the restrictions on food services were tightened due to the emergence of the Omicron variant of COVID-19, but the virus situation calmed down during the winter and the restrictions were lifted. During the spring, there were signs of a release in the pent-up demand for food services that had accumulated during the pandemic.

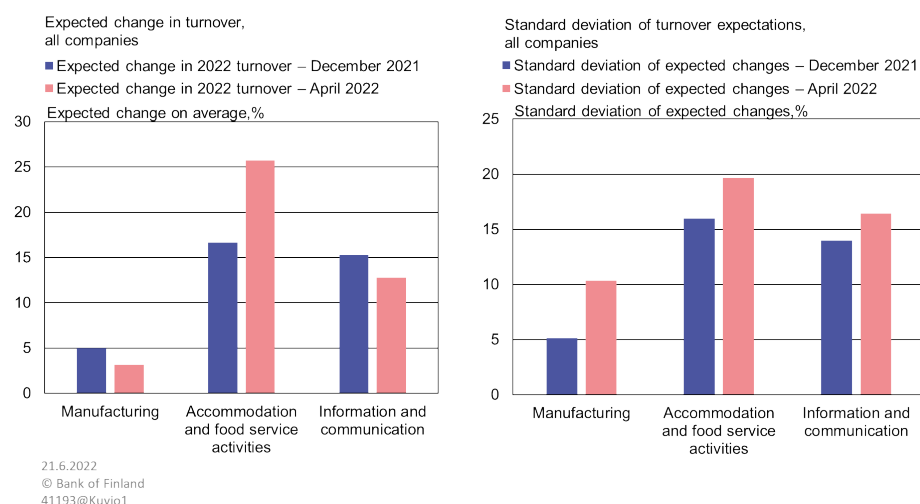
In manufacturing, growth expectations were already muted in December compared with the other two industries. The supply bottlenecks and materials shortages caused by the war were already then limiting growth opportunities in manufacturing. The results of the April survey showed that growth expectations nevertheless decreased further by almost half from December's figure of about 5%. Supply-side problems have continued to mount, and expectations for the growth in turnover are also dampened by the weak growth outlook for Finland's exports markets. In relative terms, the growth outlook weakened particularly for companies engaged in exports to Russia. For these companies, their expectation of the growth in nominal turnover was low, at a little under 2%.

The inter-company differences in growth expectations are described using the standard deviation of turnover expectations, which is calculated separately for each industry (Chart 28, right-hand side). The standard deviation increased between December and April, particularly in manufacturing. To the extent that this was due to the war, the result was as expected, because even within an industry, the impacts of the war on the financial position of companies differ considerably. The standard deviation of expectations also increased in accommodation and food service activities, which may reflect differences between companies in the importance of foreign demand.

In information and communication, the change in turnover growth expectations and standard deviations was less marked than in the other two industries, as business activity in this industry is less sensitive to changes in the COVID-19 situation or the impacts of the war.

Chart 28.

Expected change in turnover and standard deviation of turnover expectations



New markets will be found for lost exports

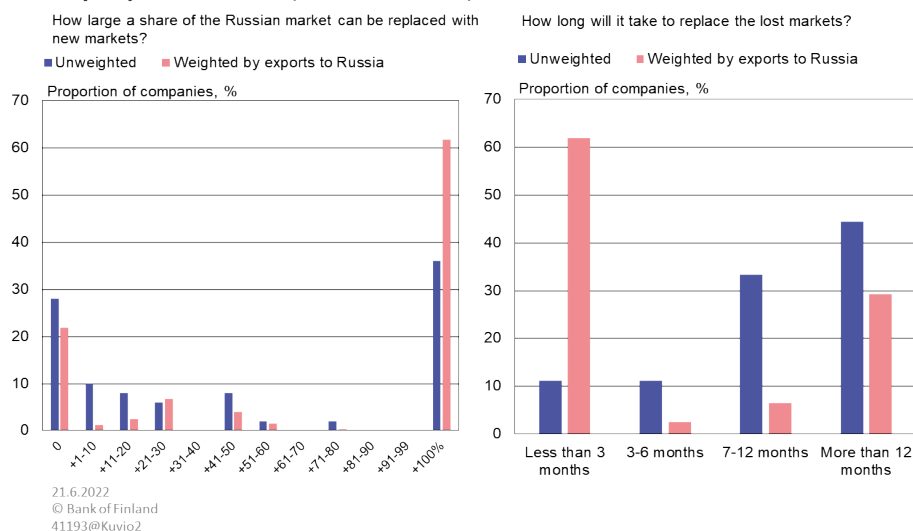
Some 41% of the respondents were engaged in exports in 2021. Just under one fifth of these companies exported to Russia, Belarus or Ukraine, and the majority of the companies were in manufacturing. To a certain extent, exporting to Russia involves larger companies, as those in the survey that exported to Russia accounted for 75% of the total volume of exports among all respondent companies. Russia typically accounted for only a minor share, i.e. 1% to 5%, of a company's total volume of exports. Only slightly less than 4% of the companies estimated that exports to Russia accounted for more than 5% of their total exports.

In the survey, the companies also estimated how large a share of the lost markets they believe they can replace with new markets. Here, two quite distinct groups of companies could be identified. Companies which estimated that they are unable to replace any of the lost exports accounted for about a quarter of the combined total exports to Russia of companies responding to the survey. Companies that estimate they can completely replace the lost markets accounted for over 60% of the combined total exports to Russia (Chart 29).^[2] Based on export-weighted figures in particular, companies will be able to replace the lost export markets fairly rapidly. Some 60% of the companies estimated that they will be able to replace the lost markets in less than three months.

Chart 29.

2. Total exports and exports to Russia in 2021, which were used as a weighting coefficient, were based on 2020 turnover figures and the estimates provided by the companies in the Tesi survey concerning their exports relative to turnover and the proportions of their total exports that go to Russia, Belarus and Ukraine.

Majority of the lost exports can be replaced



War has disrupted supply chains but companies estimate disruptions will be temporary

Of the companies that responded to the survey, only some 3% have production activity in Russia, Belarus or Ukraine, although large companies are somewhat overrepresented.^[3] However, for many companies, the war has disrupted production in other ways. Companies were asked about disruptions in supply chains using two different approaches. They were asked to assess whether their production activities or supply chains overall have experienced changes compared with the normal situation (incl. disruptions other than those caused by the war). Companies in the manufacturing as well as information and communication industries were also asked separately whether the war in Ukraine has had an impact on production.

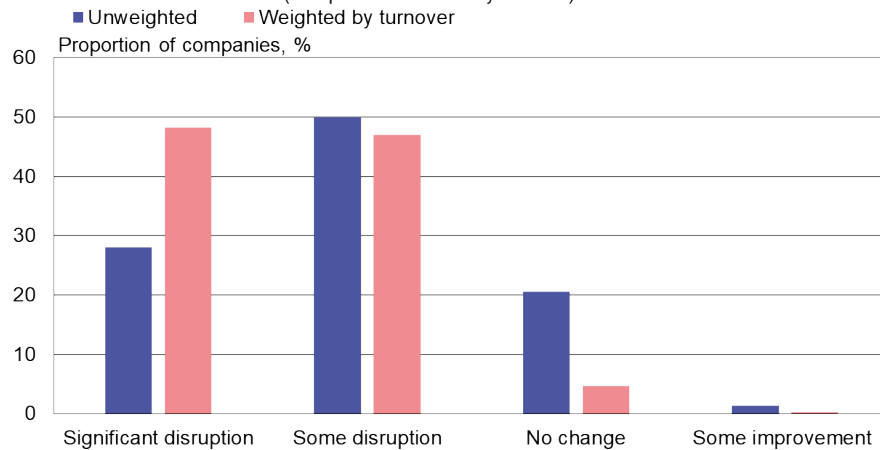
About half of all companies in the survey (weighted by turnover) estimated that at the time of the survey, the war in Ukraine was having an impact on production or on the operation of their supply chain. Some companies even estimated that their operations have been disrupted significantly; these companies represented about half of the turnover of the companies affected by the war (Chart 30). The figure, however, also includes disruptions in production and supply chains that are explained by factors other than the war. In addition to the war, production was hampered particularly by problems in the availability of materials, raw materials and electronics components, as well as logistics.

Chart 30.

3. Companies with production activity in Russia, Belarus or Ukraine accounted for about 8% the staff of companies that responded to the survey.

Significant impacts on supply chains

Have there been changes to your production activities or supply chains compared with the normal situation (companies affected by the war)?



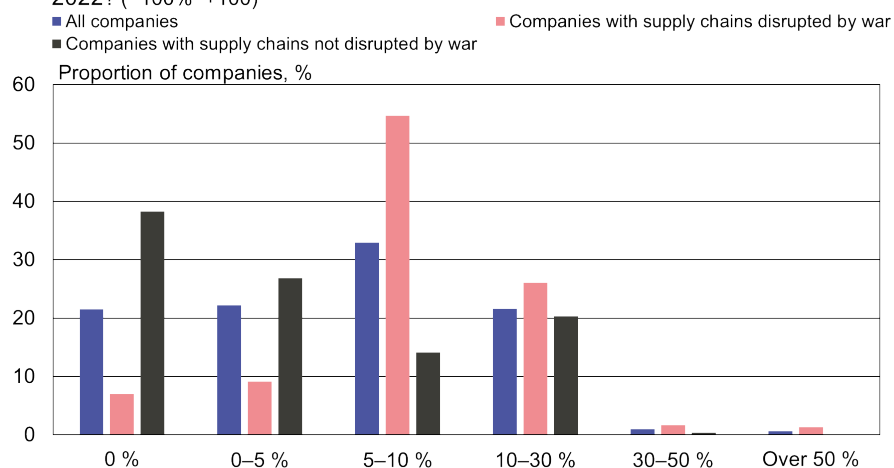
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Supply chain disruptions and the rise in input prices were already eroding companies' turnover and profitability during the COVID-19 crisis. In the case of companies whose supply chains have been disrupted by the war, the prices of inputs have risen by more, and with greater frequency, than those for other companies (Chart 31). For more than half of these companies, and taking into account the turnover weights, the prices of inputs had risen by between 5% and 10% from the previous year. For about one company in four, input prices rose by between 10% and 30%. In the case of companies whose production the war has not disrupted, prices rose significantly less. The upward trend in input prices was evident the most in logistics and materials costs.

Chart 31.

Input prices have risen

How much have input prices risen in your company since the start of 2022? (-100%–+100)



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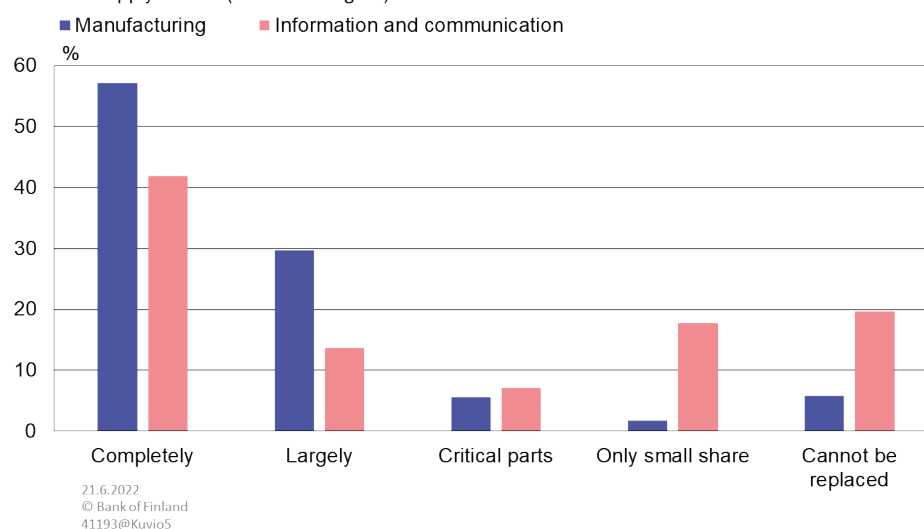
Most companies estimated that the impacts of the war on production and profitability

will be temporary. Manufacturing companies that estimated they will be able to completely replace their supply chains disrupted by the war with new ones represented almost 60% of the turnover of companies in the sector, while those which estimated they will be able to largely replace them correspondingly represented about 30% (Chart 32). In information and communication, the situation was slightly weaker. The companies in this industry reporting that they will be able to only partially replace or be unable to replace supply chains accounted for about half the turnover of respondent companies.

Chart 32.

Most disruptions in the supply chains can be repaired

How large a share of the supply chains disrupted by the war can be replaced with new supply chains (turnover weights)?



The impact of higher costs on profitability will ultimately depend on the ability of companies to pass the higher costs on to prices. The results of the survey show that companies are fairly successful in compensating for the higher production costs by raising their sales prices. Prices will rise at a fairly rapid pace this year, particularly in manufacturing. Manufacturing companies whose production the war has affected expect to raise their prices in 2022 by around 10%, on average.^[4] For information and communication companies, the expected rise in prices will be about half of this.

Risk of investments remaining below planned level

Companies were asked to estimate how their tangible and intangible investments in 2022 will deviate from the level planned, and what the reasons would be for this. Some 15% of the companies reported that the volume of tangible investments will be smaller than expected. Even in these companies, investments will slow only moderately, in most cases by a maximum of 20%, based on figures weighted by turnover (Chart 33). About one in six respondents estimated that the volume of actual investments in 2022 will be perhaps even larger than planned.

4. The estimate of the price rise is the same irrespective of whether the figures examined are unweighted or weighted by turnover.

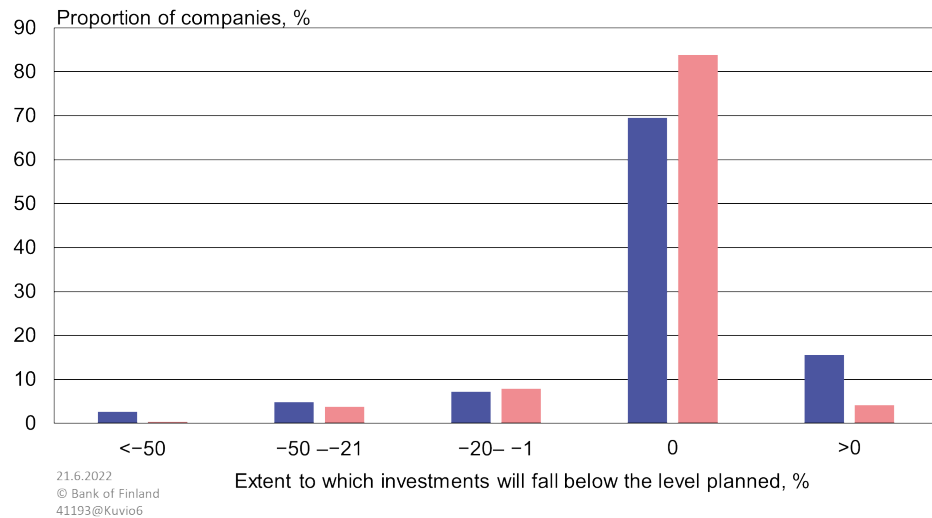
The most common factor given for the slowdown in investment growth was the war in Ukraine, which was mentioned by nearly 70% of the companies whose tangible investments will fall below the level planned. Weighted by turnover, this share is over 90%. However, the slowing of investment growth for these companies will not, on average, be any more than for other companies that projected slower-than-planned investment growth. Other reasons given for the slower growth in investments included the prolonged COVID-19 situation and the higher costs of investment projects.

Chart 33.

War-related slowdown in investment growth is moderate

Extent to which tangible investments in 2022 will fall below the level planned

■ Unweighted ■ Weighted by turnover

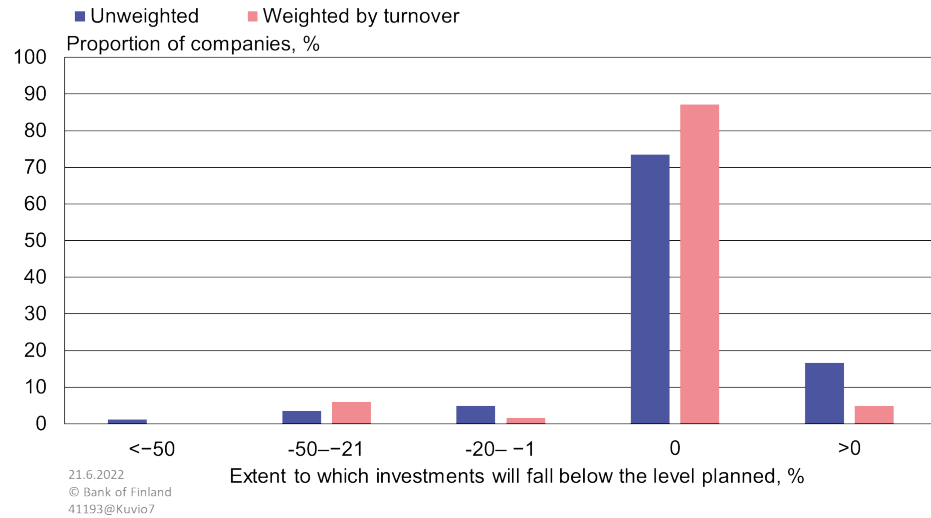


Intangible investments will grow in 2022 as planned. Less than one in ten companies estimated that intangible investments in 2022 will be smaller than planned (Chart 34). In these cases, the respondents most commonly cited the war in Ukraine as the reason for this. These companies accounted for 87% of the turnover of the companies whose intangible investments will be below the level planned.

Chart 34.

In few companies will intangible investments be below the level planned

Extent to which intangible investments in 2022 will fall below the level planned



Conclusions

The war's impact on the Finnish corporate landscape is relatively small and temporary, or at least this is the case for the three industries that participated in the Tesi survey. The impacts are, however, distributed unevenly between and within the industries. The COVID-19 pandemic particularly affected service industry companies, but now it is manufacturing industry companies in particular that are suffering from the decline in turnover and rising costs. Even though the corporate sector and the main industries as a whole seem to be experiencing only a relatively small adverse impact, the effects are nevertheless considerable for some companies, particularly those that specialised in exporting to Russia or had business operations there.

The results of the business survey show that companies are in many respects able to adjust their operations to the weaker economic environment. This is reflected in estimates of the extent to which the lost export markets can be replaced and the time required, as well as the prospects for replacing supply chains. The situation of the companies is alleviated by the fact that trade with Russia has typically accounted for a relatively small share of their business. Companies seem to be able to pass the higher costs on to the prices of end products.

There is still uncertainty over what the effects of the war will be, and uncertainty is toxic for the economy. It is slowing both investments and consumption in Finland. The key uncertainty factors include the size and duration of the rise in energy and raw material prices.

Tags

[markets](#), [Ukraine](#), [supply chains](#), [companies/firms](#), [Russia](#), [exports](#), [war](#)

Cost competitiveness is key in replacing lost trade with Russia

Today – Bank of Finland Bulletin 2/2022 – Finnish economy



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Finland's cost competitiveness has strengthened in recent years, but it has yet to fully recover to the level attained before the 2008 financial crisis. Based on current projections, cost competitiveness will improve slightly in 2022 and remain almost unchanged in the immediate years ahead. Finland's more favourable structure of exports and imports relative to its peers will help in maintaining cost competitiveness in the face of rising costs caused by Russia's invasion of Ukraine. Maintaining cost competitiveness is highly important now and in the coming years as Finnish companies wind down their trade with Russia and look for new markets for their products and services. In the short term, cost competitiveness will be supported by Finland's terms of trade.



Finland's economic competitiveness can be examined from two perspectives: cost competitiveness and non-cost competitiveness. Non-cost competitiveness, or the ability to produce high added value goods that are in demand on global markets, sits at the foundation of a country's success.

Cost competitiveness is also important, especially for countries such as Finland, where exports play an important role in the national economy. Companies that are competitive with respect to costs are more successful in international markets. Higher cost competitiveness contributes to the prospects for output and employment in industries

that engage in international trade, which together form the economy's tradable sector. Increasing the income generated by the tradable sector supports output and employment throughout the entire economy. Thus, over time, the impacts of cost competitiveness are also reflected in domestic markets.

Cost competitiveness will play an especially important role now and in the near term as a large number of Finnish companies wind down their trade with Russia and look for new markets for their products and services. This article looks at Finnish cost competitiveness in recent years and how it is projected to evolve based on the European Commission's May 2022 forecast and the June forecasts of the Bank of Finland and the European Central Bank.

Subdued growth in labour costs in recent years has improved Finland's cost competitiveness

The simplest measure of cost competitiveness is the relative labour cost (or price), which compares labour costs per employee across countries, all expressed in the same currency. [Forecast errors for labour costs in Finland are significantly smaller, on average, than forecast errors for labour productivity](#), so it might be prudent to weight changes in relative labour costs when forecasting cost competitiveness (Kajanoja and Pönkä, 2021). Given the current environment of heightened uncertainty, forecasting changes in labour costs and productivity is difficult.

As illustrated in Chart 35, Finland's relative labour costs declined in the 2010s compared with the first 12 euro area countries and a larger group of advanced-economy trading partners.^[1] Comparisons with the euro area are useful, as a large share of Finnish exports are to markets in the euro area and exchange rate fluctuations can be ignored when comparing countries within the monetary union. In recent years labour costs have grown more slowly in Finland than in the larger group of advanced-economy trading partners. According to the European Commission's latest forecast published in May 2022, labour cost growth will also continue to be slower in Finland than in the advanced-economy trading partners group in the coming years. Contributory factors here are a depreciating euro and rapid wage growth, especially in the United States.

Compared with the first 12 euro area countries, Finland's relative labour costs began to increase slightly around the start of the COVID-19 pandemic. By this measure Finland's relative labour costs have been contributing negatively to Finnish competitiveness since 2019. Before the pandemic, Finland's relative labour costs had been decreasing since 2016, largely as a result of the Competitiveness Pact.

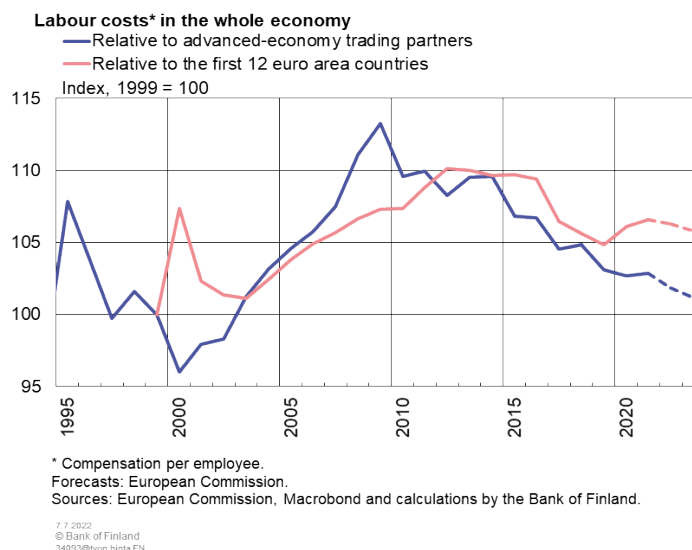
Any comparison of changes in labour costs that occurred during the COVID-19 pandemic is made difficult by the different publicly-funded short-time working schemes introduced by governments to cushion the impact of the crisis. The rise in Finland's relative labour

1. Only the first 12 members of the euro area are included here, in part for data availability reasons and also because later members are not traditionally seen as competitors to Finland due to their different export structures. Wages are also considerably more volatile in some of the newer euro area countries than in Finland and a rising trend may be attributable to economic convergence. These phenomena do not convey much useful information about Finnish cost competitiveness.

costs will remain short-lived according to European Commission's latest forecast, and a slight decline is projected in 2022–2023. It is worth noting that projections of labour costs in the immediate years ahead are subject to exceptional uncertainty stemming from the economic effects of the war and high inflation.

Chart 35.

European Commission projects that Finland's relative labour costs will start to fall



European Commission forecast sees Finnish cost competitiveness remaining higher than before

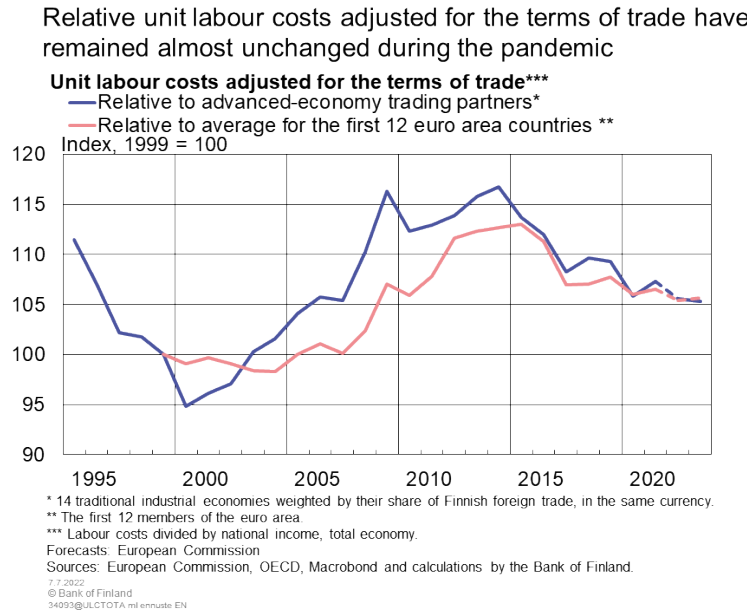
For many years between 2000 and 2015, there was a deterioration in Finland's cost competitiveness measured using relative unit labour costs adjusted for the terms of trade (Chart 36). Cost competitiveness has since improved, especially as a result of the 2017 Competitiveness Pact and moderate wage settlements. Using the same measure, competitiveness remained virtually unchanged during the pandemic years of 2020–2021 relative to both the euro area countries and the larger group of trading partners. Based on currently available data, Finland's competitiveness declined slightly in 2021.

The European Commission's forecast projects that Finnish competitiveness will improve marginally in 2022 and level out in 2023. According to the Commission's projections, Finland's cost competitiveness in 2022 will be better than its 2019 pre-pandemic level relative to both comparator groups of countries.

Measurements of cost competitiveness recorded during the pandemic should be treated with caution. In addition, the economic effects of the Ukraine war make it more difficult to predict changes in competitiveness. Productivity growth, which is needed for calculating changes in unit labour costs, is difficult to forecast because of the crises but is expected to fall short of earlier projections both in Finland and in other countries. This puts upward pressure on projections of unit labour costs.

Another factor determining the accuracy of the near-term forecasts will be the pay settlements reached in different countries in an environment of high and rising inflation. The Bank of Finland's earnings forecast is based on the collective bargaining agreements made so far in the current round of negotiations, in which wage rises for 2022 are around 2%, but the latest pay settlement for municipal workers was made after the Bank's forecast.

Chart 36.

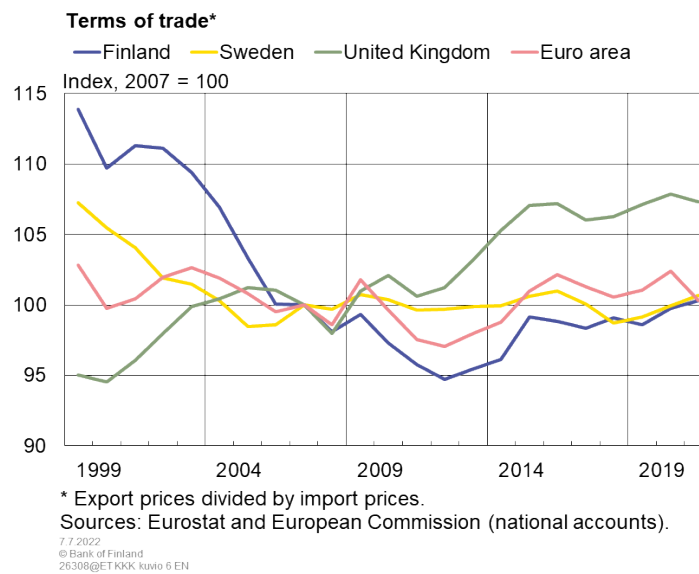


It has been important that the terms of trade are taken into account when assessing Finnish cost competitiveness, as Finland's terms of trade were on a long decline during the late 1990s and the first decade of the new millennium (Chart 37). The terms of trade are defined as the ratio between a country's export and import prices. As a result of the decline in the terms of trade, relative labour costs were not as useful for measuring cost competitiveness in Finland as they were in most comparator countries (Kajanoja, 2017). When the terms of trade are weakening, changes in the terms-of-trade-adjusted GDP will account for the diminished impact of GDP changes on real domestic income (Kajanoja, 2017).

Finland's terms of trade have improved somewhat during the past decade and in 2021 stood at about the same level as in 2007.

Chart 37.

Finland's terms of trade were declining for a long time



Moderate labour cost growth has improved Finland's cost competitiveness since the 2010s

We examine below how different factors have contributed to changes in cost competitiveness as measured by unit labour costs adjusted for the terms of trade. As illustrated in Chart 2, Finland's relative unit labour costs adjusted for the terms of trade have mostly declined since the 2010s, which means that Finnish cost competitiveness has improved. This is largely due to labour costs growing more moderately in Finland than in the comparator countries (Chart 38).

Exchange rates have also played a fairly large role when looking at the comparator group of advance-economy trading partners, which includes countries outside the euro area. While exchange rate movements have weakened Finland's cost competitiveness to an extent during some years, over the review period as a whole they have strengthened Finland's competitiveness. The impact of labour productivity on cost competitiveness has fluctuated during the 2010s, but its cumulative effect has been negative. That is, labour productivity has increased at a slower rate in Finland than in the comparator countries. The terms of trade have had a negative, though rather small, cumulative impact on cost competitiveness, through the 2010s.

In recent years labour productivity has had an increasingly large impact on cost competitiveness. Finland's competitiveness declined in 2021 largely because labour productivity growth was lower in Finland than in the comparator countries. On the other hand, labour productivity had a substantial strengthening effect on competitiveness in 2020, as Finland's economic contraction caused by the COVID-19 crisis was smaller than in most other countries. Similarly, Finland's labour productivity growth lagged behind that of most of the comparator countries in 2021 largely because Finland had less of a pandemic gap to close.

The European Commission expects labour productivity to have only a small impact on

Finnish competitiveness in 2022 and 2023. According to the Commission's forecast, productivity will increase at a similar rate in Finland and in the first 12 euro area countries and the larger group of advanced-economy trading partners. However, it should be stressed that productivity forecasts are highly uncertain in the current economic environment and productivity estimates recorded during the pandemic may yet be revised.

Labour costs increased at a slower pace in Finland than in the comparator countries during the first year of the pandemic in 2020 and, after labour productivity, had the second largest positive impact on Finnish competitiveness. When labour costs rise more moderately at home than abroad, domestic companies become relatively more cost efficient and cost competitiveness is improved, provided other factors remain unchanged. In 2021 labour costs had a small but negative impact on Finnish competitiveness. The European Commission forecasts that labour cost growth will be slightly more moderate in Finland than in other countries in 2022 and 2023, suggesting that labour costs will contribute positively to Finnish competitiveness.

In contrast to the 2010s, exchange rates movements in 2020 and 2021 had only a small impact on unit labour costs adjusted for the terms of trade. The European Commission projects that the role of exchange rates will be larger in 2022, with exchange rate movements helping to strengthen Finnish competitiveness, as the euro is projected to depreciate against other currencies.

The terms of trade had a significant strengthening impact on Finnish competitiveness in 2021. The European Commission's forecast projects the same for 2022. Finland's exceptionally strong terms of trade relative to those of comparator countries during these two years are largely a result of the structure of Finland's exports and imports. The rise in energy and raw material prices in 2022 due to Russia's invasion of Ukraine and the pre-existing shortages of intermediate goods have significantly increased the costs faced by companies in Finland and in the comparator countries.

However, unlike many of the comparator countries, Finland is a major exporter of raw materials and petroleum products. While the prices of Finnish imports have risen as a result of the war, so have the prices of Finnish exports. This means that Finland's terms of trade are projected to strengthen relative to those of most of the comparator countries. This will, as a result, improve Finland's relative unit labour costs adjusted for the terms of trade. Finland's structure of exports and imports will thus support Finnish competitiveness in the short run. In the longer term, however, Finland's economic growth and living standards would benefit from a production structure capable of producing higher value added.

Chart 38.

Labour productivity has had a large impact on cost competitiveness in recent years

Contributions to annual change in relative*** unit labour costs adjusted for the terms of trade

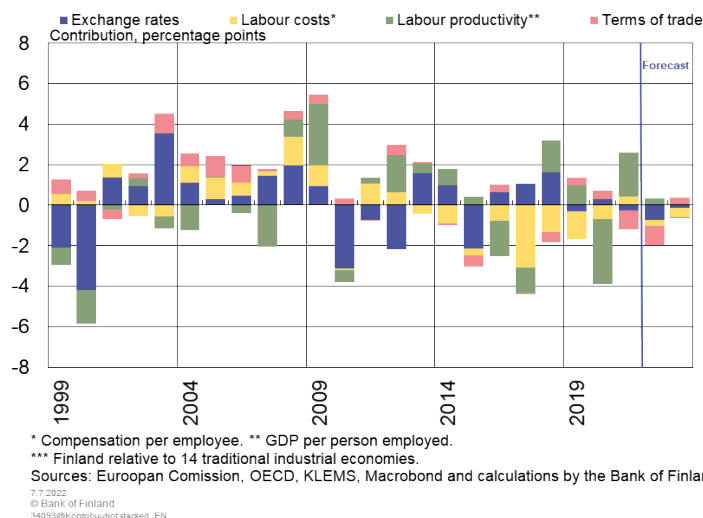


Table 1 lists the European Commission's projected changes over the period 2019 to 2023 for unit labour costs in the whole economy and for its components labour productivity and labour costs, which are also part of the indicators of cost competitiveness outlined above. Finnish labour costs grew slightly faster than the euro area average in 2020 and 2021 and contributed to the divergence in unit labour costs. In 2022 and 2023 the European Commission projects that labour costs will increase somewhat faster in the euro area. As noted, labour productivity has had a larger impact on cost competitiveness than labour costs during the review period covered in Table 1, as the differential in productivity growth between Finland and the euro area is larger than the differential in labour cost growth. Productivity growth in Finland has mainly been slow relative to the euro area, and the European Commission projects this trend to continue.

Before the COVID-19 pandemic in 2019, Finland's unit labour costs increased at the same pace as the euro area's despite the decline in labour productivity. This was due to Finland's moderate labour cost growth. In 2020 the COVID-19 pandemic caused a sharp dip in the euro area's productivity, but in Finland productivity weakened significantly less. As stated earlier, this temporarily boosted Finland's competitiveness. Although, at the same time, Finland's labour costs increased at a faster pace than in the euro area, growth in Finland's unit labour costs remained below the euro area average. As the gradual recovery from the worst of the pandemic began in 2021, growth in labour costs picked up quite strongly in Finland and in the euro area. In parallel with this, Finland's productivity growth was substantially weaker than in the euro area, resulting in Finland's unit labour costs increasing at a pace higher than the euro area average.

According to the European Commission's projections, Finland's unit labour costs will grow slightly faster than the euro area average in 2022–2023. Finnish labour cost growth is projected to be lower than the euro area average, and the rise in Finland's unit labour costs will be especially due to Finnish productivity growth falling behind relative to the euro area. However, the projected differential in unit labour costs is very small or even negligible after forecast uncertainty is taken into account.

Table 1.

Slower productivity growth is pushing up Finland's unit labour costs relative to the euro area in 2022

% change on previous year	2019	2020	2021	2022 ^f	2023 ^f
Finland					
Labour costs*	1.3	0.4	4.4	3.3	3.0
Productivity**	-0.6	-0.4	1.4	0.6	1.2
Unit labour costs	1.9	0.8	3.0	2.7	1.8
Euro area					
Labour costs*	2.1	-0.7	4.1	3.6	3.5
Productivity**	0.3	-4.9	4.2	1.4	1.5
Unit labour costs	1.9	4.5	-0.1	2.2	2.0

* Compensation per employee

** GDP per person employed

f = forecast.

Sources: Statistics Finland, Eurostat and projections by the European Commission.

Manufacturing profitability further improved

In addition to relative labour costs and unit labour costs adjusted for the terms of trade, another common indicator of competitiveness is real unit labour costs in manufacturing, or manufacturing profitability (Chart 39). Compared with relative labour costs, this measure is more closely connected to the prospects for output and employment in the tradable sector, as relative labour costs are looked at in relation to nominal, instead of real, value added. Unit profitability and corporate capacity for labour compensation are not dependent on output volume but on output value growth (Kajanoja, 2017).

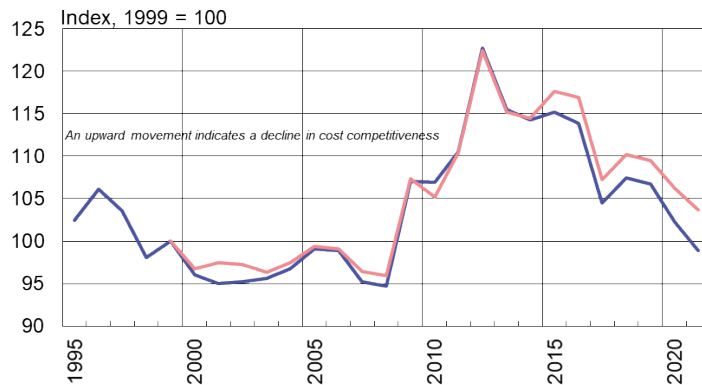
The relative profitability of Finnish manufacturing industry remained fairly stable from 1995 all the way up to the financial crisis of 2008. During the financial crisis cost competitiveness as measured by this indicator sharply deteriorated over the period to 2012. In 2012 the manufacturing industry's relative profitability began to recover and continued to improve even during the pandemic years of 2020–2021 compared with both the euro area and the larger group of advanced-economy trading partners. Finnish manufacturing industry's relative profitability has yet to fully recover from its collapse during the financial crisis, which occurred because of a collapse in productivity, higher labour cost growth than in other countries, and persistent weak growth in the price of value added.

Chart 39.

Relative real unit labour costs in manufacturing have continued to decline

Real unit labour costs in manufacturing

— Relative to advanced-economy trading partners
— Relative to average for euro area 19



Sources: Eurostat, OECD, Macrobond and calculation by the Bank of Finland.

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Forecasts by the Bank of Finland and ESCB similarly suggest that cost competitiveness will remain more or less unchanged

In the following we examine Finland's competitiveness in the light of figures and forecasts from the Bank of Finland and the European System of Central Banks (ESCB). The ESCB forecasts a largely similar path for Finnish cost competitiveness as the European Commission (Chart 40 and Chart 41).

Finland's relative labour costs have evolved as illustrated in Chart 6, with figures from the ESCB and the European Commission telling a similar story. The small discrepancy between the ESCB and the European Commission figures is because the first 12 euro area countries are used as a comparator group in the Commission's figures.^[2] Both parties forecast that Finland's relative labour costs will decline in 2022–2023. Compared with the time before the pandemic in 2019, relative labour costs are projected to remain almost unchanged.

Chart 40.

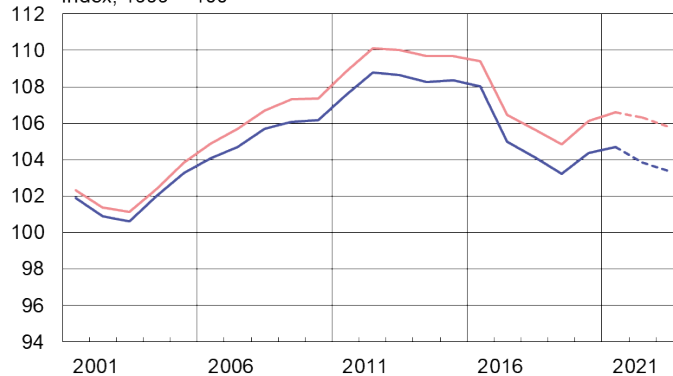
2. The first 12 members of the euro area are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. The countries included in the comparator group used by the ESCB vary slightly over time, as new countries are added as they join the euro area. Following the first 12 members, Slovenia joined in 2007, Cyprus and Malta in 2008, Slovakia in 2009, Estonia in 2011, Latvia in 2014, and Lithuania in 2015.

ESCB and European Commission both estimate that Finland's relative labour costs will begin to decrease

Labour costs* relative to the euro area

— ESCB — European Commission (euro area 12)

Index, 1999 = 100



* Compensation per employee.

Sources: Statistics Finland, Eurostat, Bank of Finland and ECB forecasts, European Commission and Macrobond.

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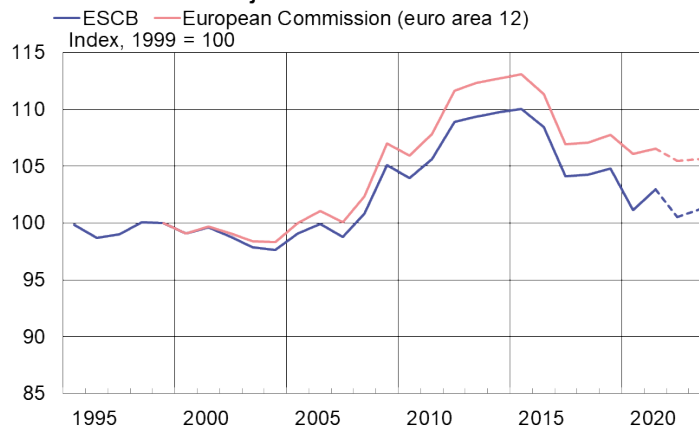
Finland's competitiveness as measured by unit labour costs adjusted for the terms of trade strengthened moderately from 2019 to 2021 relative to the euro area as a whole (Chart 41). It is possible that the larger comparator group used by the ESCB includes countries that have seen a considerable decline in competitiveness, in which case the growth in competitiveness in the larger comparator group will have been weaker than in the smaller group. It is also possible that further revisions of the data will narrow the gap between the two indicators.

Finland's cost competitiveness is projected to improve relative to the euro area in 2022, before slightly levelling out in 2023. Because of the Ukraine war and the COVID-19 pandemic, productivity growth projections are subject to exceptionally high uncertainty. Labour cost growth may also differ from its projected level due to persistent high inflation. The projections for Finland do not take into account the impact of the pay settlement for municipal workers, and pay settlements in other countries may differ significantly from those projected. Together these contribute significant uncertainty to projections of cost competitiveness.

Chart 41.

ESCB forecasts a larger decline in Finland's relative unit labour costs adjusted for the terms of trade than the European Commission

Unit labour costs* adjusted for the terms of trade relative to the euro area



* Labour costs divided by national income.

Sources: Statistics Finland, Eurostat, Bank of Finland and ECB forecasts, European Commission, OECD and Macrobond.

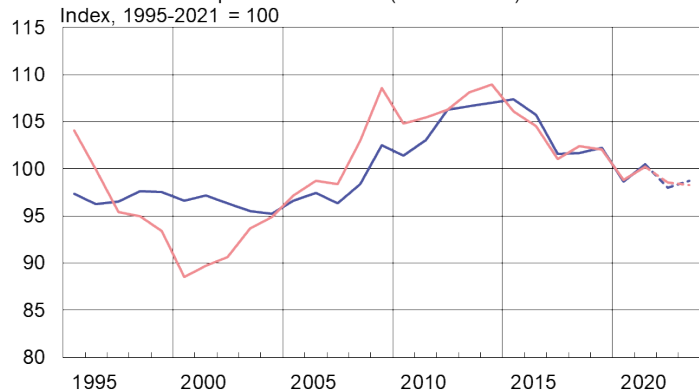
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When Finland's relative unit labour costs adjusted for the terms of trade are looked at in relation to their long-term average, we see that after a sustained high, Finnish cost competitiveness entered a slump from 2007 all the way until 2019 (Chart 42). In 2020 and 2021 competitiveness as measured by unit labour costs adjusted for the terms of trade has remained close to its long-term average, which is especially due to Finland's higher rate of productivity growth relative to the comparator countries. According to the forecasts by the ESCB and the European Commission, Finnish cost competitiveness is projected to remain slightly above its long-term average during the forecast years 2022–2023.

Chart 42.

Unit labour costs adjusted for the terms of trade are projected to settle near their long-term average

Unit labour costs* adjusted for the terms of trade relative to the euro area



* Labour costs divided by national income.

Sources: Statistics Finland, Eurostat, Bank of Finland and ECB forecasts, European Commission, OECD and Macrobond.

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It is noteworthy that cost competitiveness has recovered very slowly from its decline

following the 2008 financial crisis. In spite of the 2017 Competitiveness Pact and the moderate wage agreements, cost competitiveness has yet to fully recover to its pre-financial crisis level. The short-term rigidity of wages and a sudden decline in the profitability of companies can thus lead to a very long-lasting need for adjustment. Cost competitiveness will play an important role in determining the success of many Finnish companies, now and in the near future, as they look for new markets to replace lost trade with Russia. In the prevailing environment of high inflation, measures aimed at maintaining Finnish cost competitiveness are especially important.

Sources:

Kajanoja, Lauri (2017) [Measuring cost competitiveness in Finland](#). Bank of Finland.

Kajanoja, Lauri ja Pönkä, Harri (2021) [Mitkä ennusteet ovat hyödyllisimpiä kun palkkaratkaisuja mitoitetaan](#). Bank of Finland.

Tags

[cost competitiveness](#), [Russia](#), [competitiveness](#), [Finland](#)

Forecast tables for 2022–2024 (June 2022)

21 Jun 2022 – Bank of Finland Bulletin 2/2022 – Finnish economy

The Finnish economy will grow 1.7% in 2022 and 0.5% in 2023.

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

% change on previous year					
	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP at market prices	-2.3	3.5	1.7	0.5	1.5
Imports of goods and services	-6.6	5.3	3.5	1.0	1.8
Exports of goods and services	-7.5	4.7	1.5	2.1	3.5
Private consumption	-4.1	3.1	1.7	0.6	1.0
Public consumption	0.4	3.2	1.8	-0.3	0.5
Private fixed investment	-2.9	4.6	4.7	-1.3	0.5
Public fixed investment	11.2	-12.0	6.9	2.0	2.5

^f=forecast

Sources: Bank of Finland and Statistics Finland.

2. CONTRIBUTIONS TO GROWTH¹

	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP, % change	-2.3	3.5	1.7	0.5	1.5
Net exports	-0.3	-0.2	-0.8	0.5	0.7
Domestic demand excl. inventory change	-2.1	2.7	2.5	0.1	0.8
of which Consumption	-2.1	2.4	1.3	0.2	0.6
Investment	-0.1	0.3	1.2	-0.2	0.2
Inventory change + statistical discrepancy	0.2	1.0	0.0	0.0	0.0

¹Bank of Finland calculations. Annual growth rates using the previous year's GDP shares at current prices as weights.

Sources: Bank of Finland and Statistics Finland.

3. BALANCE OF SUPPLY AND DEMAND, PRICE DEFLATORS

Index 2015 = 100, and % change on previous year

	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP at market prices	106.1	109.0	115.2	117.9	120.3
	1.6	2.7	5.7	2.4	2.0
Imports of goods and services	99.7	109.5	124.3	126.8	127.7
	-5.1	9.8	13.5	2.0	0.7
Exports of goods and services	100.4	110.8	125.4	128.1	129.2
	-3.9	10.4	13.2	2.1	0.9
Private consumption	104.1	106.1	112.0	114.6	116.7
	0.5	2.0	5.6	2.3	1.8
Public consumption	106.2	108.5	112.4	115.0	117.2
	3.5	2.1	3.6	2.4	1.9
Private fixed investment	111.1	112.5	117.0	120.2	123.3
	1.3	1.3	3.9	2.8	2.6
Public fixed investment	107.5	109.6	114.6	117.2	119.3
	0.2	2.0	4.6	2.2	1.9
Terms of trade (goods and services)	100.7	101.3	100.9	101.0	101.1
	1.3	0.6	-0.4	0.1	0.2

Sources: Bank of Finland and Statistics Finland.

4. BALANCE OF SUPPLY AND DEMAND, AT CURRENT PRICES

EUR million and % change on previous year

	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP at market prices	238,079	253,023	272,018	279,970	289,963
	-0.8	6.3	7.5	2.9	3.6
Imports of goods and services	84,537	97,881	114,764	118,254	121,196
	-11.3	15.8	17.2	3.0	2.5
Total supply	322,532	350,815	386,685	398,124	411,056
	-3.8	8.8	10.2	3.0	3.2
Exports of goods and services	85,104	98,474	112,888	117,738	122,877
	-11.0	15.7	14.6	4.3	4.4
Consumption	179,310	188,751	201,513	206,877	212,482
	-1.3	5.3	6.8	2.7	2.7
Private	121,502	127,838	137,272	141,282	145,261
	-3.6	5.2	7.4	2.9	2.8
Public	57,808	60,913	64,241	65,595	67,221
	3.9	5.4	5.5	2.1	2.5
Fixed investment	57,553	59,070	64,580	65,809	68,000
	0.8	2.6	9.3	1.9	3.3
Private	45,875	48,591	52,862	53,593	55,253
	-1.6	5.9	8.8	1.4	3.1
Public	11,678	10,479	11,718	12,216	12,747
	11.4	-10.3	11.8	4.2	4.4
Inventory change + statistical discrepancy	565	4,520	7,704	7,701	7,697
% of previous year's total demand	0.0	1.2	0.9	0.0	0.0
Total demand	322,532	350,815	386,685	398,124	411,056
	-3.8	8.8	10.2	3.0	3.2
Total domestic demand	237,428	252,341	273,797	280,386	288,179
	-0.9	6.3	8.5	2.4	2.8

Sources: Bank of Finland and Statistics Finland.

5. BALANCE OF SUPPLY AND DEMAND

% in proportion to GDP at current prices

	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP at market prices	100.0	100.0	100.0	100.0	100.0
Imports of goods and services	35.5	38.7	42.2	42.3	41.8
Exports of goods and services	35.8	38.9	41.5	42.1	42.4
Consumption	75.3	74.6	74.1	73.9	73.3
Private	51.1	50.5	50.5	50.5	50.1
Public	24.3	24.1	23.6	23.4	23.2
Fixed investment	24.2	23.4	23.7	23.5	23.5
Private	19.3	19.2	19.4	19.1	19.1
Public	4.9	4.1	4.3	4.4	4.4
Inventory change + statistical discrepancy,	0.2	1.8	2.8	2.8	2.7
Total demand	135.5	138.7	142.2	142.3	141.8
Total domestic demand	99.8	99.8	100.7	100.2	99.4

Sources: Bank of Finland and Statistics Finland.

6. PRICES

Index 2015 = 100, and % change on previous year

	2020	2021	2022 ^f	2023 ^f	2024 ^f
Harmonised index of consumer prices, 2005=100	104.0	106.1	112.1	114.7	116.8
	0.4	2.1	5.6	2.4	1.8
Consumer price index, 2005=100	103.5	105.8	111.5	114.1	116.1
	0.3	2.2	5.4	2.3	1.8
Private consumption deflator	104.1	106.1	112.0	114.6	116.7
	0.5	2.0	5.5	2.3	1.8
Private investment deflator	111.1	112.5	117.0	120.2	123.3
	1.3	1.3	3.9	2.8	2.6
Exports of goods and services deflator	100.4	110.8	125.4	128.1	129.2
	-3.9	10.4	13.2	2.1	0.9
Imports of goods and services deflator	99.7	109.5	124.3	126.8	127.7
	-5.1	9.8	13.5	2.0	0.7
Value-added deflators					
Value-added, gross at basic prices	106.4	109.5	115.2	117.8	120.2
	1.8	3.0	5.2	2.2	2.0
Private sector	106.3	109.8	115.9	118.5	121.0
	1.2	3.3	5.6	2.3	2.1
Public sector	106.8	108.3	112.1	114.1	116.2
	4.7	1.4	3.5	1.8	1.8

Sources: Bank of Finland and Statistics Finland.

7. WAGES AND PRODUCTIVITY

% change on previous year

	2020	2021	2022 ^f	2023 ^f	2024 ^f
Whole economy					
Index of wage and salary earnings	1.9	2.3	2.8	3.0	2.4
Compensation per employee	0.4	4.4	3.4	3.8	3.0
Unit labour costs	0.7	3.6	4.1	3.3	2.0
Labour productivity per employed person	-0.3	0.8	-0.7	0.5	0.9

Sources: Bank of Finland and Statistics Finland.

8. LABOUR MARKET

1,000 persons and % change on previous year

	2020	2021	2022 ^f	2023 ^f	2024 ^f
Labour force survey (15–74-year-olds)					
Employed persons	2,482	2,547	2,610	2,611	2,627
	-2.0	2.6	2.4	0.1	0.6
Unemployed persons	208	210	182	183	181
	14.7	0.7	-13.5	0.7	-0.9
Labour force	2,691	2,757	2,791	2,794	2,808
	-1.0	2.5	1.2	0.1	0.5
Working-age population (15–64-year-olds)	3,421	3,417	3,418	3,417	3,416
	-0.2	-0.1	0.0	0.0	0.0
Labour force participation rate, %	65.1	66.9	67.8	68.0	68.5
Unemployment rate, %	7.8	7.6	6.5	6.5	6.4
Employment rate (15–64-year-olds), %	70.7	72.2	73.7	73.8	74.3

Sources: Bank of Finland and Statistics Finland.

9. GENERAL GOVERNMENT REVENUE, EXPENDITURE, BALANCE AND DEBT

% relative to GDP

	2020	2021	2022 ^f	2023 ^f	2024 ^f
General government revenue	51.5	52.3	51.1	51.2	50.8
General government expenditure	57.0	54.9	53.1	52.9	52.4
General government primary expenditure	56.4	54.4	52.6	52.4	51.8
General government interest expenditure	0.7	0.5	0.5	0.5	0.6
General government net lending	-5.5	-2.6	-1.9	-1.8	-1.6
Central government	-5.5	-3.2	-2.5	-2.0	-1.9
Local government	-0.1	-0.3	-0.7	-0.8	-0.8
Social security funds	0.0	1.0	1.2	1.0	1.1
General government primary balance	-4.9	-2.1	-1.5	-1.2	-1.0
General government structural balance ¹	-4.3	-2.0	-2.0	-1.7	-1.6
General government debt (EDP)	69.0	65.8	64.4	65.4	66.1
Central government debt	52.5	50.9	50.1	51.0	51.7
Tax ratio	41.8	42.7	41.3	41.3	41.1

Current prices, EUR billion

General government net lending	-13.1	-6.5	-5.3	-4.9	-4.7
Central government	-13.1	-8.1	-6.7	-5.6	-5.5
Local government	-0.1	-0.8	-1.9	-2.2	-2.3
Social security funds	0.1	2.4	3.3	2.9	3.1
General government debt (EDP)	164.2	166.4	175.0	182.9	191.6

¹ Based on the cyclical adjustment method used by the European System of Central Banks.

Sources: Bank of Finland and Statistics Finland.

10. BALANCE OF PAYMENTS

EUR billion					
	2020	2021	2022 ^f	2023 ^f	2024 ^f
Exports of goods and services (SNA)	85.1	98.5	112.9	117.7	122.9
Imports of goods and services (SNA)	84.5	97.9	114.8	118.3	121.2
Goods and services account (SNA)	0.6	0.6	-1.9	-0.5	1.7
% to GDP	0.2	0.2	-0.7	-0.2	0.6
Investment income and other items, net (+ statistical discrepancy)	4.0	4.3	1.7	1.7	1.7
Current transfers, net	-2.9	-3.1	-2.6	-2.7	-3.1
Current account, net	1.7	1.8	-2.8	-1.5	0.3
Net lending, % to GDP					
Private sector	6.2	3.3	0.9	1.2	1.7
Public sector	-5.5	-2.6	-2.0	-1.8	-1.6
Current account, % to GDP	0.7	0.7	-1.0	-0.6	0.1

Sources: Bank of Finland and Statistics Finland.

11. INTEREST RATES

%					
	2020	2021	2022 ^f	2023 ^f	2024 ^f
3-month Euribor ¹	-0.4	-0.5	0.0	1.3	1.6
Average interest rate on new loan drawdowns ²	1.5	1.5	1.9	2.7	3.0
Average interest rate on the stock of loans ²	1.3	1.2	1.5	2.6	2.8
Average interest rate on the stock of deposits ³	0.0	0.0	0.2	1.0	1.1
Yield on Finnish 10-year government bonds ¹	1.4	-0.1	1.2	1.7	1.8

¹Technical assumption derived from market expectations.

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

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

Sources: Bank of Finland and Statistics Finland.

12. INTERNATIONAL ENVIRONMENT

The Eurosystem staff projections

	2020	2021	2022 ^f	2023 ^f	2024 ^f
GDP, % change on previous year					
World	-2.8	6.3	3.0	3.3	3.4
USA	-3.4	5.7	2.5	1.9	2.0
Euro area	-6.5	5.4	2.8	2.1	2.1
Japan	-4.7	1.7	1.7	1.9	1.1
Imports, % change on previous year					
World	-8.3	11.4	4.3	3.2	3.6
USA	-8.9	14.0	9.0	2.0	3.2
Euro area	-9.3	8.8	4.1	3.5	3.4
Japan	-7.3	5.1	5.1	4.2	4.2
Index, 2015 = 100, and % change on previous year					
Import volume in Finnish export markets	105.9	117.0	119.3	122.0	126.2
	-8.3	10.5	2.0	2.2	3.5
Export prices (excl. oil) of Finland's trading partners, national currencies	105.5	116.6	133.2	136.1	137.1
	-1.4	10.6	14.2	2.2	0.8
Export prices (excl. oil) of Finland's trading partners, in euro	97.1	106.6	124.7	128.3	129.3
	-3.8	9.8	16.9	2.9	0.8
Industrial raw materials (excl. energy), HWWA index, in US dollars	119.9	173.7	184.4	173.5	166.5
	1.2	44.9	6.2	-5.9	-4.0
Oil price, USD per barrel ¹	41.5	71.1	105.8	93.4	84.3
	-33.9	66.5	49.1	-11.7	-9.8
Finland's nominal competitiveness indicator ²	109.2	109.9	107.4	106.6	106.6
	2.5	0.7	-2.3	-0.8	0.0
US dollar value of one euro ¹	1.14	1.18	1.07	1.05	1.05
	2.0	3.5	-9.5	-1.8	0.0

Sources: Bank of Finland and Statistics Finland.

12. INTERNATIONAL ENVIRONMENT

¹Technical assumption derived from market expectations.

²Narrow plus euro area, 1999Q1 = 100

Sources: Bank of Finland and Statistics Finland.

13. Current and December 2021 forecast

	2021	2022 ^f	2023 ^f	2024 ^f
GDP, % change	3.5	1.7	0.5	1.5
December 2021	3.5	2.6	1.5	1.3
Inflation (HICP), %	2.1	5.6	2.4	1.8
December 2021	2.1	2.0	1.6	1.8
Employment rate, %	72.2	73.7	73.8	74.3
December 2021	72.0	72.8	73.3	73.6
Unemployment rate, %	7.6	6.5	6.5	6.4
December 2021	7.7	7.1	6.6	6.6
Current account, % to GDP	0.7	-1.0	-0.6	0.1
December 2021	1.5	0.0	0.1	0.1
General government net lending, % to GDP	-2.6	-1.9	-1.8	-1.6
December 2021	-2.9	-1.9	-1.3	-1.2
General government debt (EDP), % to GDP	65.8	64.4	65.4	66.1
December 2021	66.9	66.5	67.1	67.5

Source: Bank of Finland.

Tags

economic outlook, forecast, indicators, economic situation, economic forecast