



MINISTRY OF FINANCE

Economic Survey

Winter 2018

Ministry of Finance publications – 33c/2018



Economic Prospects

Ministry of Finance publications 33c/2018

Economic Survey

Winter 2018

Ministry of Finance

ISBN PDF:978-952-251-978-8

Layout: Government Administration Unit, Publications

Helsinki 2018

Description sheet

Published by	Ministry of Finance	December 19th 2018	
Authors	Economics Department		
Title of publication	Economic Survey, Winter 2018		
Series and publication number	Ministry of Finance publications 33c/2018		
Subject	Economic Prospects		
ISBN PDF	978-952-251-978-8	ISSN (PDF)	1797-9714
Website address (URN)	http://urn.fi/URN:ISBN:978-952-251-978-8		
Pages	68	Language	English
Keywords	Public finance, economic development		
<p>Abstract</p> <p>Finland's total economic output has increased in a broad range of sectors this year, but the growth has been slower than in 2017. The GDP will grow by 2.5% in 2018. Because of strong economic growth and higher demand for labour, the employment rate will be 2.5% higher than in 2017, climbing to 71.6%.</p> <p>In 2019, GDP growth will slow down to 1.5%. As more trade barriers are set up, world trade will grow more slowly, which will put the brakes on export growth and investment expectations. A marked slowdown in investment growth is expected in 2019, mainly as a result of a fall in construction investments. Finland's economic growth will slow down further in 2020, to 1.3%, after which the growth rate will fall to below one per cent in the medium term.</p> <p>Driven by a more rapid rise in earnings, growth in household disposable income will continue. Even though the inflation is accelerating, there will be a substantial growth in real income and household spending will increase next year, compared with 2018.</p> <p>Despite a slowdown in economic growth, moderate growth in real earnings will maintain demand for labour force. Because of the fairly high number of unemployed and concealed unemployed, and the measures increasing the supply of labour, the supply of labour will not yet restrict the growth of employment and the economy as a whole, even though there is a shortage of skilled labour in a number of sectors.</p> <p>Because of steady economic growth and measures curbing spending increases, Finland will achieve near-balance in its public finances. The general government debt to GDP ratio will also fall in the next few years. A weakening of public finances is expected in the early 2020s, however, as economic growth is slowing down and the adjustment measures are coming to an end. Ageing of the population is weakening Finland's public finances by increasing pension, health and care expenditure.</p>			
Publisher	Ministry of Finance		
Publication sales/ Distributed by	Online version: julkaisut.valtioneuvosto.fi Publication sales: julkaisutilaukset.valtioneuvosto.fi		

Kuvailulehti

Julkaisija	Valtiovarainministeriö	19.12.2018	
Tekijät	Kansantalousosasto		
Julkaisun nimi	Economic Survey, Winter 2018 (Taloudellinen katsaus, talvi 2018)		
Julkaisusarjan nimi ja numero	Valtiovarainministeriön julkaisu 33c/2018		
Teema	Talousnäkömät		
ISBN PDF	978-952-251-978-8	ISSN PDF	1797-9714
URN-osoite	http://urn.fi/URN:ISBN:978-952-251-978-8		
Sivumäärä	68	Kieli	Englanti
Asiasanat	Julkinen talous, taloudellinen kehitys		
<p>Tiivistelmä</p> <p>Suomen talouden tuotanto on lisääntynyt tänä vuonna laaja-alaisesti, mutta viime vuotta hitaammin. Vuonna 2018 BKT kasvaa 2,5 %. Vahvana jatkuva talouskasvu ja voimistunut työvoiman kysyntä nostavat v. 2018 työllisten määrän 2,5 % edellisvuotta korkeammaksi ja työllisyysasteen 71,6 prosenttiin.</p> <p>Vuonna 2019 BKT:n kasvu hidastuu 1,5 prosenttiin. Maailmankauppa hidastuu kaupan esteiden lisääntyessä, mikä hidastaa viennin kasvua ja näkyy myös investointien odotuksissa. Investointien kasvun ennustetaan hidastuvan selvästi v. 2019, mikä johtuu erityisesti rakennusinvestointien kääntymisestä laskuun. Talouskasvu hidastuu edelleen 1,3 prosenttiin v. 2020, minkä jälkeen kasvu hidastuu alle 1 prosenttiin keskipitkällä aikavälillä.</p> <p>Kotitalouksien käytettävissä olevien tulojen kehitys jatkuu nopeana ansiotason nousun kiihtyessä. Inflaation kiihtymisestä huolimatta reaalitytulot kasvavat selvästi ja kotitalouksien kulutus kiihtyy ensi vuonna tähän vuoteen verrattuna.</p> <p>Talouskasvun hidastumisesta huolimatta reaali-palkkojen maltillinen kehitys ylläpitää työvoiman kysyntää. Työttömien ja piilotyöttömien melko suuresta määrästä sekä työvoiman tarjontaa lisäävistä toimenpiteistä johtuen työvoiman tarjonta ei koko talouden tasolla vielä rajoita työllisyyden ja talouden kasvua, vaikka toimialoitain ammattitaitoisesta työvoimasta on pulaa.</p> <p>Hyvä suhdannetilanne ja menojen kasvua hillitsevät toimet vahvistavat julkisen talouden tasapainon tuntumaan. Myös julkisen talouden velka suhteessa BKT:hen laskee lähivuosina. Julkinen talous alkaa kuitenkin vähitellen heikentyä 2020-luvun alkuvuosina, kun talouskasvu hidastuu ja sopeutustoimet päättyvät. Julkista taloutta heikentää väestön ikääntyminen, joka kasvattaa eläke-, terveys- ja hoivamenoja.</p>			
Kustantaja	Valtiovarainministeriö		
Julkaisun myynti/ jakaja	Sähköinen versio: julkaisut.valtioneuvosto.fi Julkaisumyynti: julkaisutilaukset.valtioneuvosto.fi		

Presentationsblad

Utgivare	Finansministeriet	19.12.2018	
Författare	Ekonomiska avdelningen		
Publikationens titel	Economic Survey, Winter 2018 (Ekonomisk översikt, vinter 2018)		
Publikationsseriens namn och nummer	Finansministeriets publikationer 33c/2018		
Tema	Ekonomiska utsikter		
ISBN PDF	978-952-251-978-8	ISSN PDF	1797-9714
URN-adress	http://urn.fi/URN:ISBN:978-952-251-978-8		
Sidantal	68	Språk	Engelska
Nyckelord	Offentlig ekonomi, ekonomisk utveckling		
<p>Referat</p> <p>Produktionen i Finland ökade på bred front i år, men långsammare än under fjolåret. År 2018 ökar BNP med 2,5 procent. Den fortsatt starka ekonomiska tillväxten och ökningen i efterfrågan på arbetskraft gör att antalet sysselsatta 2018 blir 2,5 procent större än i fjol och sysselsättningsgraden stiger till 71,6 procent.</p> <p>År 2019 avtar tillväxten i BNP till 1,5 procent. Den globala handeln avtar när handelshindren blir fler, vilket bromsar upp exporttillväxten och påverkar investeringsförväntningarna. Investeringsökningen förutspås avta klart under 2019, vilket i synnerhet beror på att bygginvesteringarna börjar minska. Den ekonomiska tillväxten mattas av ytterligare till 1,3 procent 2020 och därefter avtar tillväxten till mindre än en procent på medellång sikt.</p> <p>Utvecklingen av hushållens disponibla inkomster är fortsatt snabb i och med att inkomstnivån stiger allt snabbare. Realinkomsterna ökar klart trots att inflationen tar fart och hushållens konsumtion tilltar nästa år jämfört med innevarande år.</p> <p>Trots den avtagande ekonomiska tillväxten upprätthåller den måttfulla utvecklingen av reallönerna efterfrågan på arbetskraft. Till följd av det stora antalet arbetslösa och dolt arbetslösa samt insatserna för att utöka arbetskraftsutbudet utgör utbudet på arbetskraft ännu inte ett hinder för sysselsättningens och ekonomins tillväxt när man ser till ekonomin som helhet, trots att det råder brist på yrkeskunnig arbetskraft inom vissa branscher.</p> <p>Det goda konjunkturläget och åtgärderna för att dämpa ökningen av utgifterna gör den offentliga ekonomin relativt balanserad. Även den offentliga skulden i relation till BNP minskar under de närmaste åren. Den offentliga ekonomin börjar emellertid så småningom försvagas under de första åren på 2020-talet, när den ekonomiska tillväxten mattas av och anpassningsprogrammet avslutas. Den offentliga ekonomin försvagas på grund av att befolkningen åldras, vilket ökar pensions-, vård- och omsorgsutgifterna.</p>			
Förläggare	Finansministeriet		
Beställningar/ distribution	Elektronisk version: julkaisut.valtioneuvosto.fi Beställningar: julkaisutilaukset.valtioneuvosto.fi		

PREFACE

This Economic Survey offers projections of economic developments in 2018–2021. In addition to short-term prospects, it includes a medium-term economic outlook extending to 2023.

The forecast and trend projections in the survey are prepared independently by the Ministry of Finance Economics Department based on the Act on the implementation of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union and on multi-annual budgetary frameworks (869/2012).

The forecasts are based on national accounts data for 2017 published by Statistics Finland in July 2018 and on other public statistical sources available by 12 December 2018.

Helsinki December 2018

Ministry of Finance Economics Department



Mikko Spolander
Director general



Jukka Railavo
Senior Financial Adviser,
Head of Macro Forecasting



Marja Paavonen
Senior Financial Adviser,
Head of Public Finance

The source for all data on materialised developments is Statistics Finland unless otherwise indicated.

SYMBOLS AND CONVENTIONS USED

-	nil
0	less than half the final digit shown
..	not available
.	not pertinent
**	forecast
CPB	CPB Netherlands Bureau for Economic Policy Analysis
HWI	Hamburgisches WeltWirtschafts Institut
IMF	International Monetary Fund
MoF	Ministry of Finance

Each of the figures presented in the tables has been rounded separately.

Contents

Preface	7
Summary	11
1 Economic outlook	19
1.2 Foreign trade.....	26
1.2.1 Exports and imports.....	26
1.2.2 Prices and current account.....	27
1.3 Domestic demand.....	29
1.3.1 Private consumption.....	29
1.3.2 Public consumption.....	31
1.3.3 Private investment.....	32
1.3.4 Public investment.....	36
1.4 Domestic production.....	36
1.4.1 Total output.....	36
1.4.2 Secondary production.....	38
1.4.3 Services.....	41
1.5 Labour force.....	43
1.6 Incomes, costs and prices.....	45
1.6.1 Wages and salaries.....	45
1.6.2 Consumer prices.....	47
2 Public finances	51
2.1 General government finances.....	51
2.2 Central government.....	55
2.3 County government.....	58
2.4 Local government.....	59
2.5 Social security funds.....	63
2.6 Long-term sustainability of public finances.....	64
Boxes:	
Economic impacts of the trade policy tensions.....	24
Role of wages and salaries in the acceleration of inflation.....	49

Summary

Economic outlook for 2018-2021

Finland's total economic output has increased in a broad range of sectors this year, but the growth will be slower than in 2017. As more trade barriers are set up, world trade will grow more slowly, which will put the brakes on export growth and investment expectations. A marked slowdown in investment growth is expected in 2019, mainly as a result of a fall in construction investments. In the medium term, growth will be less than one per cent, which is below potential output growth.

Because of steady economic growth and measures curbing spending increases, Finland will achieve near-balance in its public finances. The general government debt to GDP ratio will also fall in the next few years. A weakening of public finances is expected in the early 2020s, however, as economic growth is slowing down and the adjustment measures are no longer in effect.

Global economic growth in slowing down

The fastest growth period in the world economy is over for now and growth will slow down in the next few years. In addition to the ordinary economic cycle, the slowdown is also the result of the partial realisation of the trade conflicts between major economies. As a result of trade barriers, world trade growth will fall to 3.5% at the end of the forecast period.

The outlook for the euro area has weakened this year. There has been a particularly steep fall in industrial confidence. The United States economy is doing well but the growth rate will slow down during the forecast period towards the country's actual growth potential.

Economic growth will slow down substantially

The Finnish economy is expected to grow by 2.5% in 2018, suggesting that the year 2017 marked the peak of the current upturn. Statistics for the first months of the year have dampened the outlook. The outlook for output among manufacturing companies has already become more moderate, more barriers to growth have been set up, problems concerning the availability of labour force have increased in the construction sector and in services, and the number of new building permits is now on the decrease.

During 2018, the growth in employment has been more rapid than what could be concluded on the basis of the level of economic activity. According to the labour force survey, the number of employed persons grew by 2.7% in the period between January and October. In October, the trend of the employment rate was at 71.8%.

In 2019, economic growth will fall to 1.5%. The slowdown is broad-based but a decline in housing investments is a key factor contributing to the deceleration. The establishment of additional trade barriers will slow down export growth in 2019. Supported by expanded forest industry capacity, net exports will continue to maintain overall economic growth. Stronger price competitiveness will also boost export growth.

Return of the housing construction closer to normal levels is the main reason for slower investment growth. The establishment of additional trade barriers and weakening growth prospects in the world economy are also making industries and other sectors less willing to make investments. Large investment projects (especially in the forest industry) are boosting investments.

Driven by a more rapid rise in earnings, growth in household disposable income will continue. Even though the inflation is accelerating, there will be substantial growth in real income and household spending will increase next year, compared with 2018.

Despite a slowdown in economic growth, moderate increases in real earnings will maintain demand for labour force in 2019. Because of the fairly high number of unemployed and concealed unemployed, and the measures increasing the supply of labour, the supply of labour will not yet restrict the growth of employment and the economy as a whole. Unemployment will fall to 6.9% in 2019.

A slight slowdown in inflation is expected in the early months of 2019, as the base-line impact of energy prices is weakening and because of the recent fall in crude oil prices. Inflation will accelerate as earnings and service prices are rising.

GDP growth will slow down to 1.3% in 2020 and to 1.1% in 2021. Consumption will grow less briskly as rising inflation is slowing down the growth in disposable real income. Household savings rate is increasing but will remain below average.

The average annual growth in private investments will fall to 1.5% in the forecast period, which is half of what was predicted in the previous forecast. It is assumed in the forecast that at least one of the large investment projects will start. Because of a slowing growth path in private investments, they will only account for about 18% of GDP in 2021. The fall in housing construction will continue even though the rate of decline will slow down.

Driven by exports markets, foreign trade will continue to grow, although less briskly than in the past. Measured with unit labour costs, price competitiveness will improve again but will remain relatively steady when compared to Finland's competitors.

As unemployment is falling and the mismatch between the supply of and the demand for labour force is increasing, the rate of growth in earnings is expected to approach the annual rate of three per cent, the average for the past 18 years. In 2021, slower GDP growth will only improve the employment rate by 0.2% and unemployment will stay at 6.6%.

Public finances have a sizeable sustainability gap

Steady economic growth and measures curbing spending are helping to consolidate public finances. A few years ago, there was still a substantial deficit in Finland's public finances but as we are entering a new decade, a near-balance has been achieved. The general government debt to GDP ratio will also fall in the next few years.

A weakening of public finances is expected in the early 2020s, however, as economic growth is slowing down and the adjustment measures introduced during the current parliamentary term are coming to an end. Ageing of the population is weak-

ening Finland's public finances by increasing pension, health and care expenditure each year.

An ageing population will create substantial pressures in public finances in the long term. The increasing number of elderly people will mean more age-related expenditure, and the income generated to the public finances in the foreseeable future will not be enough to finance them. Moreover, the working-age population, which is financing Finland's welfare services and social security –through taxes, is contracting. Productivity-based economic growth is also expected to remain weak in the coming decades. This means that there is a long-term imbalance (sustainability gap) between general government revenue and expenditure, which accounts for nearly 4 % of the GDP.

Table 1. Key forecast figures

	2017	2016	2017	2018**	2019**	2020**	2021**
	EUR bn	change in volume, %					
GDP at market prices	224	2.5	2.8	2.5	1.5	1.3	1.1
Imports	85	5.6	3.5	2.5	2.3	2.1	2.1
Total supply	309	3.3	3.0	2.5	1.7	1.5	1.4
Exports	86	3.9	7.5	3.5	3.1	2.6	2.4
Consumption	173	1.9	0.8	1.1	1.2	1.1	1.1
private	122	2.0	1.3	1.0	1.6	1.4	1.2
public	51	1.8	-0.5	1.4	0.4	0.5	0.8
Investment	50	8.5	4.0	2.5	-0.1	1.2	0.3
private	40	8.7	4.6	2.2	0.8	1.6	1.2
public	9	7.9	1.8	3.2	-4.1	-0.8	-3.8
Total demand	310	3.3	3.1	2.3	1.6	1.4	1.2
domestic demand	224	3.1	1.6	1.9	1.0	0.9	0.7

Table 2. Other key forecast figures

	2016	2017	2018**	2019**	2020**	2021**
GDP, EUR bn	216	224	233	241	249	256
Services, change in volume, %	1.7	1.9	1.8	1.1	1.1	1.0
Industry, change in volume, %	2.3	7.1	3.5	2.5	1.6	1.4
Labour productivity, change, %	1.9	2.0	-0.2	0.6	0.6	0.9
Employed labour force, change, %	0.5	1.0	2.5	0.8	0.6	0.2
Employment rate, %	68.7	69.6	71.6	72.4	73.0	73.3
Unemployment rate, %	8.8	8.6	7.5	6.9	6.7	6.6
Consumer price index, change, %	0.4	0.7	1.2	1.4	1.6	1.7
Index of wage and salary earnings, change, %	0.9	0.2	1.8	2.7	3.0	2.8
Current account, EUR bn	-1.6	-1.5	-0.7	-0.0	0.7	1.0
Current account, relative to GDP, %	-0.7	-0.7	-0.3	-0.0	0.3	0.4
Short-term interest rates (3-month Euribor), %	-0.3	-0.3	-0.3	0.0	0.2	0.4
Long-term interest rates (10-year govt. bonds), %	0.4	0.5	0.7	1.0	1.5	2.1
General government expenditure, relative to GDP, %	55.9	54.0	52.9	52.2	52.0	52.1
Tax ratio, relative to GDP, %	44.0	43.3	42.3	42.2	42.3	42.0
General government net lending, relative to GDP, %	-1.7	-0.7	-0.8	-0.4	-0.1	-0.1
Central government net lending, relative to GDP, %	-2.7	-1.8	-1.3	-0.7	-0.7	-0.3
General government gross debt, relative to GDP, %	63.0	61.3	59.2	58.4	57.6	57.5
Central government debt, relative to GDP, %	47.4	47.3	45.0	44.5	43.8	43.8

Risk increasingly skewed to the downside

Further escalation of the trade conflicts is the main risk overshadowing the outlook for the world economy and world trade. Recent estimates concerning the economic impacts of the trade conflicts are described in a separate information box. For Europe, the key risks are the direction of Italy's economic policy and the uncertainty arising from Brexit. Geopolitical tensions remain high and can lead to higher than expected oil prices.

Trade barriers and a situation where they are expanding would also slow down Finnish exports. Through global value chains, China and the United States are more important to Finland as trading partners than foreign trade statistics suggest. Continuing existence of trade barriers can weaken Finland's exports more than changes in export demand.

The most significant risk in the investment forecast is that housing construction will decrease more rapidly towards normal levels. Especially the timing of large projects

involves significant upside and downside risks. Moreover, the threat of trade barriers and their expansion would further slow down investments.

Household debt is growing and has reached extremely high levels. Most of the debt has been accumulated by a relatively small number of households, which are particularly vulnerable to negative developments in the economy or the housing market. When escalating, the trends in household debt and the housing market may reduce the consumption potential of private households.

Medium-term outlook

Finland's GDP growth accelerated to 2.8% in 2017. The economy has grown at a brisk rate of 2.5% in 2018 but the growth will slow down to more moderate levels between 2019 and 2021 (to just over one per cent on average). In the medium term, between 2022 and 2023, economic growth is expected to fall below one per cent.¹ In historical terms, the growth expected for the medium term is slow, which is a result of the structural factors affecting the economy.

The growth in labour input boosts potential output growth in the year in question and, to some extent, also in the two years after that. After this, there will be a gradual reduction in the labour input because working-age population continues to fall. High structural unemployment also limits the growth of labour input.

In historical terms, growth in total factor productivity has been modest in recent years and this trend will continue. The output of high-productivity sectors has declined and services have become more predominant in the overall structure of the economy. Total factor productivity growth trend is expected to be close to one per cent in the medium term, which can be compared with an average annual growth of more than two per cent in the early years of the 2000s. The predicted total factor productivity growth trend is nevertheless well above the average of the past ten years.

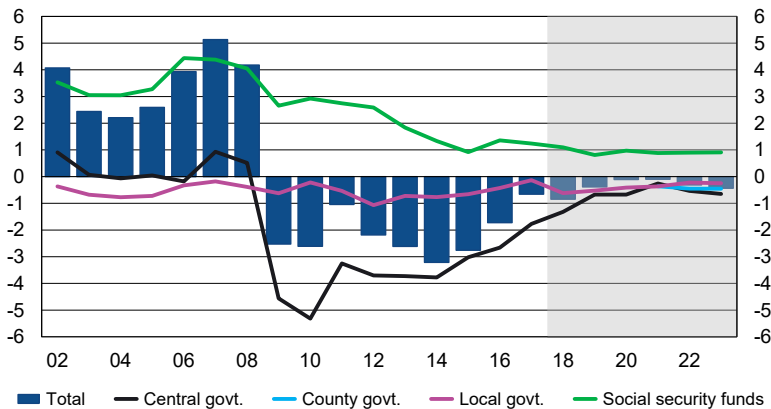
¹ Medium-term economic outlook can be estimated on the basis of the potential output, which is considered to define the growth prerequisites for the economy. In its assessments of potential output, the Ministry of Finance uses the production function method jointly developed by the European Commission and EU Member States, in which potential output growth is divided into projections of potential labour input, capital and total factor productivity. Potential output and output gap are latent variables, the assessment of which involves uncertainties, especially during a strong economic cycle and under conditions of rapid changes in the production structure.

Table 3. Key forecast figures for the medium term

	2017	2018**	2019**	2020**	2021**	2022**	2023**
GDP at market prices, change in volume, %	2.8	2.5	1.5	1.3	1.1	0.9	0.7
Consumer price index, change, %	0.7	1.2	1.4	1.6	1.7	1.8	1.8
Unemployment rate, %	8.6	7.5	6.9	6.7	6.6	6.7	6.8
Employment rate, %	69.6	71.6	72.4	73.0	73.3	73.3	73.0
General government net lending, relative to GDP, %							
Central government	-0.7	-0.8	-0.4	-0.1	-0.1	-0.3	-0.4
County government					-0.4	-0.4	-0.5
Local government	-0.1	-0.6	-0.5	-0.4	-0.4	-0.2	-0.2
Social security funds	1.2	1.1	0.8	1.0	0.9	1.0	0.9
Structural balance, relative to GDP, %	-0.4	-1.1	-0.8	-0.5	-0.4	-0.6	-0.7
General government gross debt, relative to GDP, %							
Central government debt, relative to GDP, %	61.3	59.2	58.4	57.6	57.5	57.6	57.8
County government debt, relative to GDP, %	47.3	45.0	44.5	43.8	43.8	43.7	43.7
Output gap, % of potential output ¹	-0.5	0.5	0.6	0.6	0.6	0.5	0.4

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

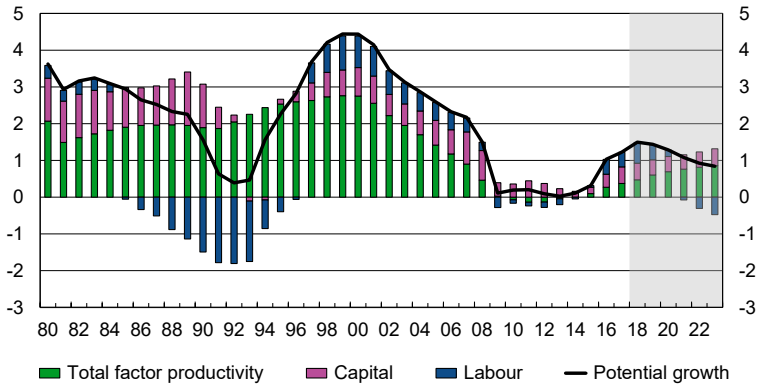
The financial balance of general government relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

Contributions to potential growth
according to EU method, %



Sources: Statistics Finland, MoF

VM34170

In addition to labour input and total factor productivity, the production conditions of the economy are also influenced by the capital stock. The low investment rate that has continued for several years has slowed down capital stock growth and has thus weakened the growth potential of the economy. Investments have picked up and the rise in the rate of investment will also increase the level of potential output through capital stock growth by an annual rate of almost 0.5%.

The output gap is expected to be about 0.5% positive relative to potential output in 2018. Finland's GDP will grow more or less at its potential rate between 2019 and 2021, which means that the positive output gap is no longer expected to grow significantly in the short term. In the medium term (between 2022 and 2023), the positive output gap is expected to start closing, as the period of high economic growth will gradually come to an end. It is, however, extremely difficult to predict the timing of the next downturn and any downturn would quickly close the positive output gap.

1 Economic outlook

Global economic growth is slowing down on a broad front

The period of fastest growth in the world economy is over for now and growth will slow down in the next few years. In addition to the ordinary economic cycle, the slowdown is also the result of the partial realisation of the trade conflicts between major economies. There has also been a rapid slowdown in the growth of world trade this year.

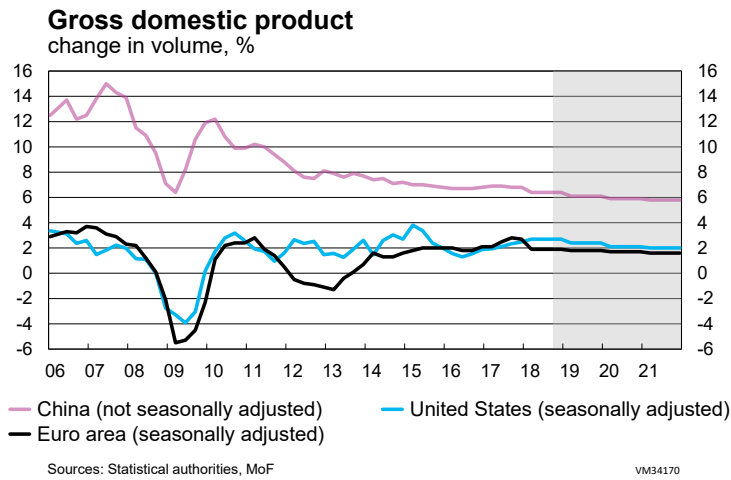
The United States economy is doing well but the growth rate will slow down during the forecast period towards the country's actual growth potential. Private consumption is the main factor behind the growth. Consumer confidence remains high but expectations about the future are weaker. Employment situation is very good. Inflation is gaining pace and the central bank is expected to tighten the monetary policy still further. The outlook for foreign trade is overshadowed by the tensions with China. The trade conflict between the two countries will slow down economic growth in the United States in the next few years.

The outlook for the euro area has weakened this year. There has been a particularly steep fall in industrial confidence. German economic indicators suggest that a slowdown can be expected. However, the contraction during the third quarter of this year was probably a temporary phenomenon. In France, third quarter growth in 2018 was strong but a slowdown is expected in the next few years as the output gap is closing. In the euro area, growth will slow down to slightly over 1.5% in the forecast period.

The uncertainty arising from Brexit is dampening growth prospects in Britain. There has been a rapid fall in the purchasing managers' index. Growth indicators are

pointing downwards. Despite low unemployment, consumer confidence remains weak. The next few years will be characterised by subdued economic growth.

In Sweden, the relatively strong economic growth has been supported by private consumption and investments. Consumer confidence remains strong but indicators suggest that a slowdown can be expected. The growth rate will drop to slightly below two per cent in the next few years.

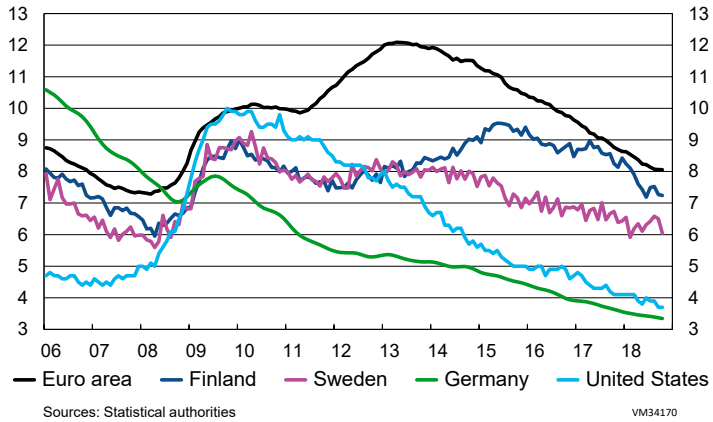


The situation in Japan is characterised by economic contraction during the third quarter of this year and weakening indicators for the next few years. Inflation has not accelerated as forecast, which means that the extremely light monetary policy supporting growth is expected to continue. An increase in value added tax set to take effect in October 2019 is creating uncertainty. Growth will slow down to slightly below one per cent in the next few years.

Economic growth in Russia will remain subdued despite a strong second quarter this year. Growth potential remains weak and economic prospects are hampered by sizeable structural problems, such as inadequacies in companies' operating environment. Growth will slow down to slightly below 1.5% in the forecast period.

Chinese economic indicators suggest that the slowdown will continue. The slowdown in retail trade, which reflects trends in private consumption, has been unprecedented this year. Exports have grown rapidly this year but the prospects are overshadowed by the trade conflict with the United States. Growth will be slightly below six per cent at the end of the forecast period.

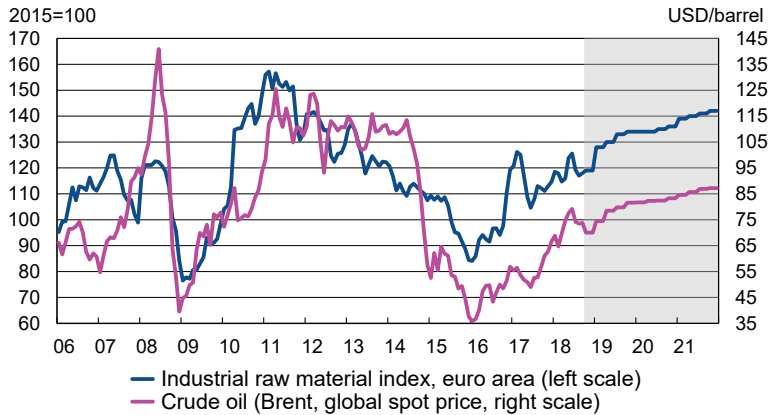
Unemployment rate seasonally adjusted, %



Driven by domestic demand, Indian economic growth will remain strong during the forecast period. The positive outlook is enhanced by the structural reforms introduced over the past few years.

There has been a steep fall in crude oil prices during the last months of the year. Oil prices are extremely sensitive to rapid changes. Partially boosted by tensions in the Middle East, the prices will increase slightly in the next few years. Prices of other raw materials are expected to go up moderately in the forecast period.

Raw materials prices



Short-term market rates are expected to rise gradually in the euro area, as the monetary policy is being gradually normalised and the inflation rate is accelerating moderately. Interest rates on government loans in the euro area have remained low. The only exceptions are Italy (political tensions) and to some extent Spain (perhaps driven by Italy).

Partly as a result of trade barriers, growth in world trade is slowing down

There has been a rapid slowdown in world trade during 2018. The decrease in imports to euro area has been particularly steep, while imports to emerging economies and the United States have been stronger. Traffic in world's ports has been on a downward part since late 2017. Trade conflict measures already introduced have also slowed down growth in world trade. Weaker global economic growth is putting brakes on the growth in the next few years. Growth in merchandise trade will slow down to 3.5% at the end of the forecast period.



Risk increasingly skewed to the downside

Further escalation of the trade conflicts is the main risk overshadowing the outlook for the world economy and world trade. Recent estimates concerning the economic impacts of the trade conflicts are described in a separate box. For Europe, the key risks are the direction of Italy's economic policy and the uncertainty arising from Brexit. Geopolitical tensions remain high and can lead to higher than expected oil prices. A situation where the trade conflicts will remain temporary and further escalation can be prevented is probably the main positive risk.

Table 4. Gross domestic product

	2016	2017	2018**	2019**	2020**	2021**
	change in volume, %					
World (PPP)	3.2	3.6	3.7	3.6	3.5	3.4
Euro area	1.8	2.4	1.9	1.8	1.7	1.6
EU	0.0	2.3	1.8	1.7	1.6	1.5
Germany	1.9	2.5	2.0	1.9	1.8	1.7
France	1.2	2.3	1.7	1.6	1.5	1.4
Sweden	3.3	2.4	2.4	1.9	1.8	1.8
United Kingdom	1.8	1.7	1.3	1.0	0.8	0.8
United States	1.6	2.2	2.7	2.4	2.1	2.0
Japan	1.0	1.7	1.1	0.9	0.8	0.7
China	6.7	6.9	6.4	6.1	5.9	5.8
India	8.2	7.1	7.5	7.6	7.4	7.3
Russia	-0.2	1.6	1.5	1.4	1.3	1.2

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

Table 5. Background assumptions

	2016	2017	2018**	2019**	2020**	2021**
World trade growth, %	1.5	4.7	4.1	3.8	3.5	3.4
USD/EUR	1.10	1.15	1.17	1.10	1.08	1.06
Industrial raw material price index, EA, € (2015=100)	96.5	114.5	119.0	131.3	134.8	140.5
Crude oil (Brent), \$/barrel	45.2	54.8	72.0	78.6	82.4	86.1
3-month Euribor, %	-0.3	-0.3	-0.3	0.0	0.2	0.4
Government bonds (10-year), %	0.4	0.5	0.7	1.0	1.5	2.1
Export market share (2010=100) ¹	93.0	95.0	94.0	94.0	93.0	92.0
Import prices, %	-2.5	3.5	3.8	3.3	2.3	1.7

¹Ratio of export growth to world trade growth

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

ECONOMIC IMPACTS OF THE TRADE POLICY TENSIONS

Trade policy tensions have been on the increase in the world economy this year. The United States view of 'unfair' trade balance with regions and individual countries lies behind the situation. The dispute has been particularly heated between the United States and China but it has also involved the European Union. According to the theory of international trade, tariffs and other trade barriers slow down economic growth and, consequently, affect wellbeing. Moreover, in today's global economy, the production of a commodity often takes place in more than one country. Trade barriers interfere with the functioning of these global value chains and increase the prices of end products. Tariffs introduced by a country may have a negative impact on the country's own production, if it is part of these value chains. At the same time, trade barriers can also cause trade to relocate and lead to a situation where a country or a region can indirectly benefit from trade restrictions between other countries or regions.

The impacts of trade disputes on the growth in international trade and total output are reviewed below in the four trade conflict scenarios based on the model created by the Netherlands Bureau for Economic Policy Analysis (CPB)¹. The impacts are assessed in 2030 and relative to the baseline where no trade conflicts exist. In the first scenario, the United States unilaterally imposes tariffs on steel (25%) and aluminium (10%). In the second scenario, China, the EU, Canada and Mexico will retaliate by imposing their own tariffs. In the third scenario, the United States and China will end up in a trade dispute. In the fourth scenario, in addition to what has taken place in the three first scenarios, the United States will impose tariffs of 25% on car imports from the EU. In addition to these scenarios, the impacts of three trade war scenarios are also presented.

US exports would be hardest hit in all four conflict scenarios. Chinese exports would be second hardest hit. At the same time, compared with these two countries, the impacts on EU exports would be negligible. In scenarios 3 and 4, the impacts on Chinese total output would be higher than the impacts on US total output. In scenarios 2, 3 and 4, the impacts on EU total output would be slightly positive in the short term. This is due to the relocation of trade described above and a favourable terms of trade effect.

CPB has also assessed the impacts of a full-scale trade war (gradual increases in tariffs on all tradable commodities) by the year 2030, relative to the baseline where no trade conflicts exist. The impacts of a trade war between the USA and the EU are presented in scenario 5. Scenario 6 also assesses the impacts of a trade war between the USA and China taking place in addition to the conflict between the USA and the EU. Finally, in scenario 7, all OECD countries are added to the nations involved in the above conflicts. There would only be losers in these three scenarios. In scenario 6, China would be

¹The impacts have been estimated using the computable general equilibrium (CGE) model applied by CPB and describing the world economy (WorldScan model).

hardest hit by the negative impacts on total output and the EU would come second. The trade between the USA, China and Europe would contract by one quarter. In scenario 7, world's total output would decrease by between 1.2 and 2.5% by the year 2030, relative to the baseline.

The trade conflict scenarios described above are partially based on trade policy measures that have already been introduced. In other words, if the measures are not cancelled, they will already have an impact on foreign trade and total output in the foreseeable future. In fact, the most important international forecasting institutes have already slightly lowered their estimates of world's total output in the next few years. It is clear that the full-scale trade wars described in scenarios 5, 6 and 7 would be extremely harmful from the perspective of international trade and global total output.

The International Monetary Fund (IMF) has reached similar conclusions with respect to trade conflicts. The first three layers on the five-point analysis produced by the IMF are similar to what the CPB has presented. The fourth layer is a confidence shock: Investments in the USA will fall by one per cent over a period of two years, and the shock will also impact its trading partners. The fifth layer is a confidence shock: Profits of US companies will fall by 15% and the shock will also impact US trading partners. According to the results of IMF's computable general equilibrium model, long-term economic growth in the USA would be reduced by a maximum of about one per cent relative to the baseline, while the figure for China would be more than 0.5% and the figure for the euro area about 0.1%.

The OECD has also estimated the impacts of trade conflicts on foreign trade in a global economy.

In the METRO model of the OECD it is assumed that a number of G20 countries will raise tariffs in specific sectors to 25%. This hypothetical scenario covers about seven per cent of the world trade, which totals about USD 1.4 trillion. North America would be hardest hit, followed by China and Japan. The EU would suffer smaller impacts.

Sources:

Bollen, Johannes & Rojas-Romagosa, Hugo: Trade Wars: Economic impacts of US tariff increases and retaliations, an international perspective. CPB Background Document, July 2018.

International Monetary Fund IMF World Economic Outlook. Challenges to Steady Growth. World Economic and Financial Surveys, October 2018.

ECD: http://www.oecd.org/trade/oecd-trade-scenario-2-increasing%20tariffs.pdf?utm_source=Adestra&utm_medium=email&utm_content=Read%20it%20now...&utm_campaign=Trade%20October%202018&utm_term=demo

1.2 Foreign trade

Slowing down of the growth of world trade, growing risks and the latest statistics dampen the prospects for Finland's foreign trade over the whole forecast period. Supported by improved price competitiveness, Finnish exports will continue to grow, however, even though unit labour costs are going up again. In addition to an increase in exports, import growth is also driven by domestic demand.

1.2.1 Exports and imports

After experiencing strong growth in 2017, exports have increased less than expected this year. Finland's export demand and export forecasts are slightly weaker than the growth in world trade as a whole. Over the past three years, exports have grown faster than the demand for Finnish exports but they will return close to the demand growth path in the forecast period.

Growth in export volumes was at its peak in the early part of the year but it has died down, becoming negative in the third quarter. Weakening of exports is partially the result of a weakening economic outlook in Germany and Russia, which are both important markets for Finnish goods, even though economic growth in Sweden, another important market, remains solid. Exports of goods have slowed down this year but in the forecast period, they are sustained by a steady completion of ship orders in the coming years. A strong growth in the exports of motor vehicles has boosted the growth in service exports.

Imports grew rapidly in the first months of the year but the rate of growth has slowed down towards the end of the year. Growth in the imports of goods slowed down close to zero during the last two quarters, whereas imports of services set off to a rapid growth. For example, imports by tourists increased by 11% during the second quarter on a year-on-year basis.

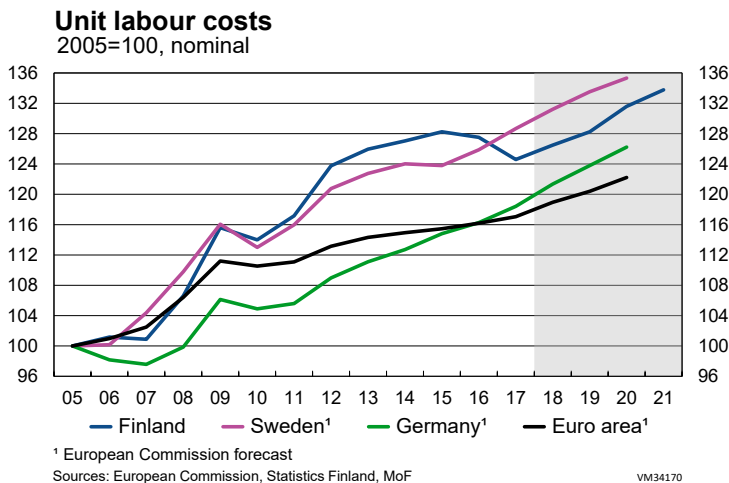
Table 6. Foreign trade

	2016	2017	2018**	2019**	2020**	2021**
	change in volume, %					
Exports of goods and services	3.9	7.5	3.5	3.1	2.6	2.4
Imports of goods and services	5.6	3.5	2.5	2.3	2.1	2.1
	change in price, %					
Exports of goods and services	-2.1	3.1	3.4	2.6	2.0	1.5
Imports of goods and services	-2.5	3.5	3.8	3.3	2.3	1.7

1.2.2 Prices and current account

There will be a further acceleration of export and import prices this year, after which the rate will slow down towards the averages typical of developed economies. According to the IMF, export prices in developed economies will increase more rapidly than forecast this year and in 2019 but the rate of growth will slow down towards the end of the forecast horizon. Terms of trade have weakened continuously since 2015 but the weakening will stop during the forecast period as import price growth will slow down more rapidly than the growth in export prices.

Increases in raw material and oil prices will boost import prices. Increases in import prices are usually accompanied by increases in export prices because one third of all inputs used in export production come from outside Finland. The tariffs already in effect and the threat of new tariffs will also lead to higher estimates of increases in export and import prices. Despite a slowdown in world trade growth, some of the product categories important to Finland may still be in high demand, which helps to make them more expensive. According to the export unit value index of the Finnish Customs, wood prices have increased by 10% and pulp prices by 15% since 2017. Deviating from the assumed growth trend, oil prices have decreased substantially during the last months of this year. If the fall in oil prices is permanent, it will also mean lower growth in export and import prices.



The current account based on the 2017 balance of payments was revised downwards in the autumn, which led to lower current account growth forecasts for the entire forecast period (primary income from abroad was three billion euros lower than previously estimated). There will, however, be a steady improvement in terms of trade in the forecast period as exports grow slightly faster than imports and as the primary income from abroad is, on average, expected to be positive in a situation where the world economy is growing faster than the Finnish economy.

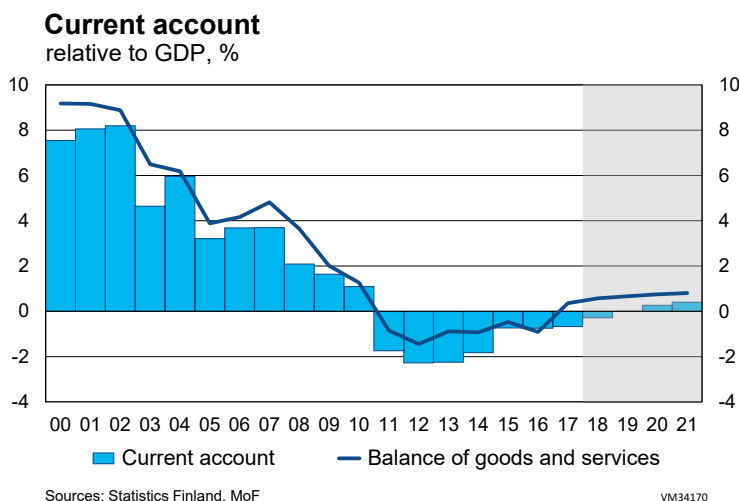


Table 7. Current account

	2016	2017	2018**	2019**	2020**	2021**
	EUR bn					
Balance of goods and services	-2.0	0.8	1.3	1.6	1.9	2.1
Factor incomes and income transfers, net	0.4	-2.3	-2.0	-1.6	-1.2	-1.0
Current account	-1.6	-1.5	-0.7	-0.0	0.7	1.0
Current account, relative to GDP, %	-0.7	-0.7	-0.3	-0.0	0.3	0.4

1.3 Domestic demand

1.3.1 Private consumption

Slower growth in household consumption

There will be a marked slowdown in private consumption growth in 2018 even though the household real income growth will accelerate to more than two per cent. According to Statistics Finland, growth in private consumption in the early part of the year has, on average, been slower than in 2017. The consumption of non-durable items, such as food and fuels, has decreased over the past two years. At the same time, there was a further increase in the demand for durable goods in the early part of the year.

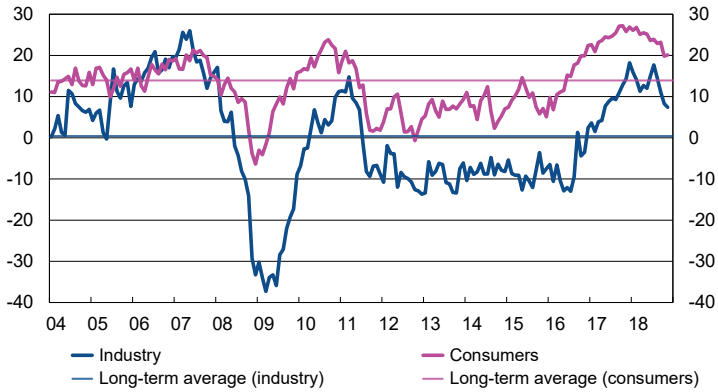
In 2019, private consumption will be boosted by higher earnings and a higher employment rate. The wage bill will increase by as much as 4% and it will sustain a rapid growth in household disposable income, compared with the situation in the past few years. However, accelerating inflation will slow down the growth in household disposable real income, decelerating the growth in private consumption.

An increase in household disposable income is also supported by a growth in social current transfers as there will again be a substantial increase in pension with income average annual growth will be more than three per cent. At the same time, however, a decrease in unemployment expenditure will slow down the growth in current transfers.

Further rapid growth in earnings will contribute to the growth in the wage bill in 2020 and 2021. Reinstatement of the public sector holiday bonuses in 2020 will temporarily accelerate the growth in earnings. Real income growth will slow down to about 1.5%, which will slow down growth in private consumption.

There will no longer be any further decline in the household savings rate in 2018. During the forecast period, the savings rate will reach almost one per cent relative to disposable income as growth in consumption is expected to remain slower than growth in earnings. Supported by low interest rates and a high employment rate, household debt relative to disposable income will continue to increase. The rate of growth will slow down as the impact of the factors boosting the trend will weaken.

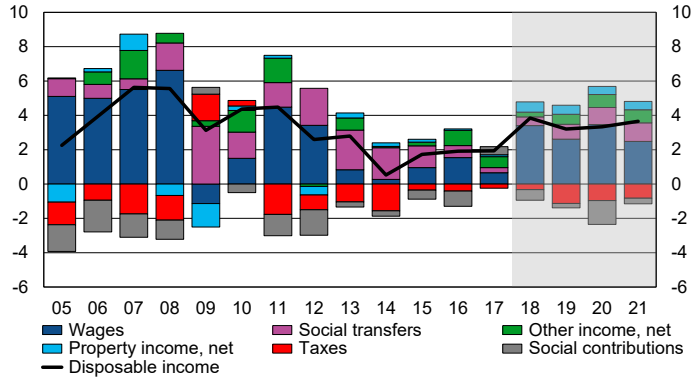
Industry and consumer confidence balance, seasonally adjusted



Source: European Commission

VM34170

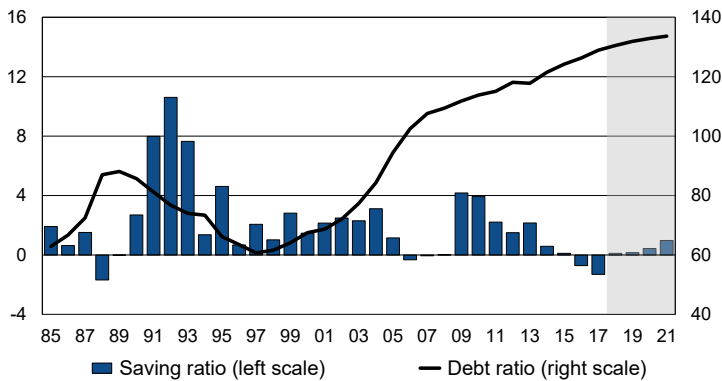
Households' disposable income change and growth impact, %



Sources: Statistics Finland, MoF

VM34170

Household savings and debt % of disposable income



Sources: Statistics Finland, MoF

VM34170

1.3.2 Public consumption

Public consumption expenditure contracted last year, a result of a decrease in central government consumption expenditure. The largest items in public consumption expenditure are personnel expenses, and goods and services purchased. The adjustment measures introduced by the current Government and the Competitiveness Pact have helped to slow down growth in these areas in recent years.

Public consumption expenditure has increased again this year and the growth is expected to continue over the entire forecast period. Pay increases and a one-off performance item are among the factors boosting the growth of the public consumption price in 2018 and 2019. In 2019 and 2020, the public consumption price will also be increased by the reinstatement of full holiday bonuses. The establishment of counties will change the structure of the public sector from 2021 when about one half of all local government consumption expenditure will be transferred to county government.

Table 8. Consumption

	2017	2016	2017	2018**	2019**	2020**	2021**
	share, %	change in volume, %					
Private consumption	100.0	2.0	1.3	1.0	1.6	1.4	1.2
Households	94.6	1.9	1.4	1.1	1.6	1.3	1.3
Durables	8.0	5.3	3.5	4.0	2.6	2.1	1.3
Semi-durables	7.8	1.3	2.7	1.5	1.6	0.9	1.2
Non-durable goods	25.5	1.1	-0.4	-0.4	0.9	1.2	1.2
Services	53.4	1.6	1.8	1.3	1.7	1.3	1.2
Consumption by non-profit institutions	4.6	2.7	0.2	0.0	0.5	0.5	0.5
Public consumption	100.0	1.8	-0.5	1.4	0.4	0.5	0.8
Total		1.9	0.8	1.1	1.2	1.1	1.1
Individual consumption expenditure in general government		1.1	0.1	2.0	0.5	0.5	1.2
Total individual consumption expenditure		1.7	1.0	1.2	1.1	1.4	1.5
Households' disposable income		1.9	1.9	3.8	3.2	3.3	3.7
Private consumption deflator		0.7	1.1	1.3	1.5	1.7	1.8
Households' real disposable income		1.2	0.8	2.5	1.7	1.6	1.8
		%					
Consumption as proportion of GDP (at current prices)		78.9	77.3	76.1	75.9	75.8	75.9
Household savings ratio		-0.7	-1.3	0.1	0.2	0.4	1.0
Household debt ratio ¹		126.3	128.9	130.5	131.9	132.9	133.6

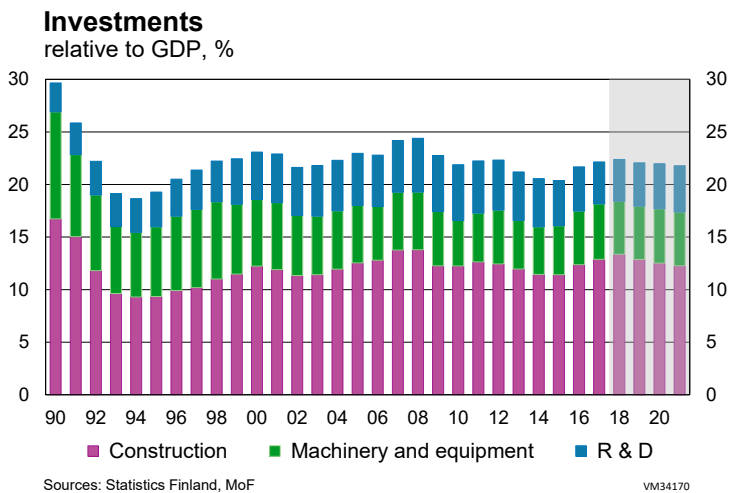
¹ Household debt at end-year in relation to disposable income.

1.3.3 Private investment

A decline in housing construction is causing fluctuations in private investments

The growth rate in private investments will slow down over the entire forecast period, compared with the previous forecast. There are several reasons for this development. In particular, the return of housing construction from an exceptionally high level closer to normal is making the investment scene more volatile. Weakening growth prospects in the world economy are also making industries and other sectors less willing to make investments.

This suggests that the investment boom is coming to an end. At the same time, however, a number of large construction projects have been under preparation in Finland for many years, especially in the forest industry. It is assumed in the forecast that some of them will also be started. Nevertheless, the average annual growth in private investments will fall to 1.5% in the forecast period, which is half of what was predicted in the previous forecast. Because of a slowing growth path in private investment, they will stay at around 18% of GDP in 2021.



In the early part of 2018, private investments have been growing at a substantially slower pace than what had been reported before. According to the latest figures, investments in machinery and equipment are now on the decline. At the same time, however, strong growth in housing construction will continue in 2018, for the fourth successive year. It is estimated that private investments will grow by slightly more than two per cent in 2018.

There will be little growth in private investments in 2019 and the main reason for this is the contraction of housing construction from an exceptionally high annual level of approximately 43,000 new homes. A decline of more than 15% in home building permits is an indication of this. It is assumed, however, that it will take several years before the 'normal levels' (about 30,000 housing units) have been reached.

The decrease will be faster in 2019 and it will slow down in the years after that. A broad-based investment structure and a steady growth in household income continue to support this trend. Total investments will remain at last year's levels as public investments are also on the decline.

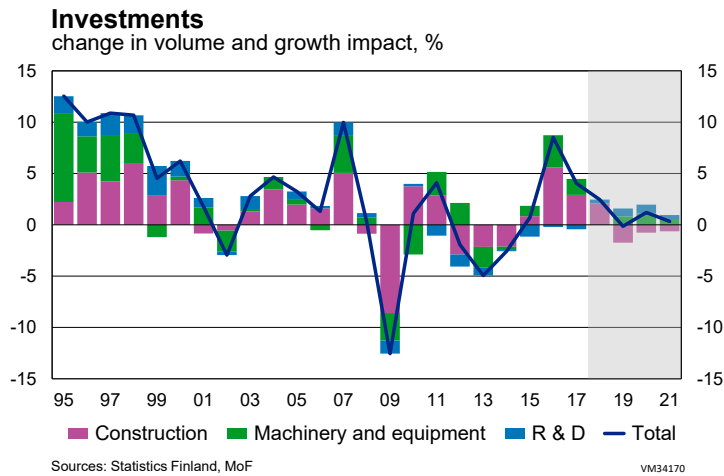
In 2020 and 2021, private investments will grow at roughly the same rate as GDP. Real interest rates will remain negative, which will continue to support investments. It is expected that in 2021, the growth rate will gradually approach long-term levels.

As regards different types of investment, there will be a substantial decrease in building construction in the next few years as a large number of business construction projects are also nearing completion and similar growth is not now in sight. The building permit volumes in non-residential construction decreased by about 6% between January and September, compared with 2017. Because of long construction times, the fall in the number of building permits for office, business and warehouse construction projects will only have an impact on investment in 2019.

At the same time, the outlook for 2020 is already better, which is due to several large projects planned in the forest industry and other sectors, as well as a number of hospital and school projects. Many of these large projects are also likely to become reality because they have already been issued with building and environmental permits. The launching of another large forest industry project was also announced in summer.

Little change is expected in the volume of renovation investments and they are expected to grow at an annual rate of about 1.5% in the forecast period. Volumes in housing renovation are expected to be higher than volumes in non-residential renovation investments.

Sales volume figures suggest that the demand in the civil engineering sector has weakened substantially. This is somewhat surprising because construction is at a brisk level and public investments have also continued to increase this year. The forecast has been lowered, however, and the growth in civil engineering investments is expected to remain close to zero over the entire forecast period. The emphasis in civil engineering investments is in the public sector and private sector investments only account for about one third of the work.



Investments in machinery and equipment in industries are expected to fall in 2018. Operating surpluses will grow more slowly in the forecast period, which will also slow investment growth. Service sectors account for more than 50% of all machinery and transport equipment investments. Large projects planned for the long term may provide a significant boost for investments in machinery and equipment.

Steady growth in employment will support investments in technology and education. Investments in research and development are expected to grow by two per cent this year and the rate is expected to accelerate further in 2019 and 2020.

The most significant risk in the investment forecast is that housing construction will decrease more rapidly towards normal levels. It is also clear that the timing of the large projects will involve significant upside and downside risks.

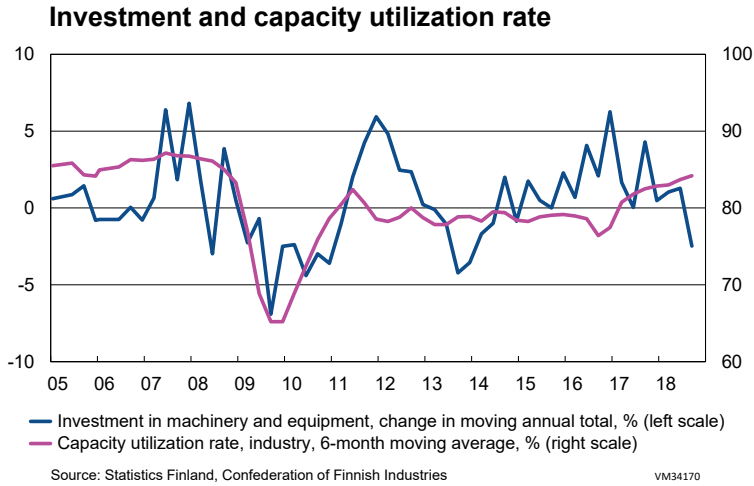


Table 9. Fixed investment by type of capital asset

	2017	2016	2017	2018**	2019**	2020**	2021**
	share, %	change in volume, %					
Buildings	48.6	10.0	6.2	4.2	-3.5	-1.7	-1.3
Residential buildings	29.1	10.5	5.9	5.3	-4.2	-4.6	-2.7
Non-residential buildings	19.5	9.1	6.6	2.6	-2.3	2.6	0.6
Civil engineering construction	9.6	10.2	0.2	0.4	0.0	0.9	0.0
Machinery and equipment	23.8	13.7	6.6	0.0	3.6	4.8	2.0
R&D-investments ¹	18.0	-1.0	-2.3	2.1	4.4	4.6	2.5
Total	100.0	8.5	4.0	2.5	-0.1	1.2	0.3
Private	81.6	8.7	4.6	2.2	0.8	1.6	1.2
Public	18.4	7.9	1.8	3.2	-4.1	-0.9	-3.8
		%					
Investment to GDP ratio (at current prices)							
Fixed investment		22.1	22.4	22.4	22.1	22.0	21.8
Private		17.9	18.2	18.2	18.1	18.2	18.1
Public		4.2	4.1	4.2	3.9	3.8	3.7

¹Includes cultivated assets and intellectual property products

1.3.4 Public investment

Local government investments account for more than half of public investments, while central government investments account for less than half. The proportion of social security funds of the investments is very small. There has typically been a great deal of fluctuation in public investment expenditure and this is expected to continue in the coming years. This year, central government investment expenditure has been boosted by the Government's key projects in particular. Their completion will reduce public investment expenditure in 2019. Busy hospital construction will keep local government investment expenditure at a high level in the coming years. It is expected that the annual change in the public investment price will be close to the long-term average in the forecast period.

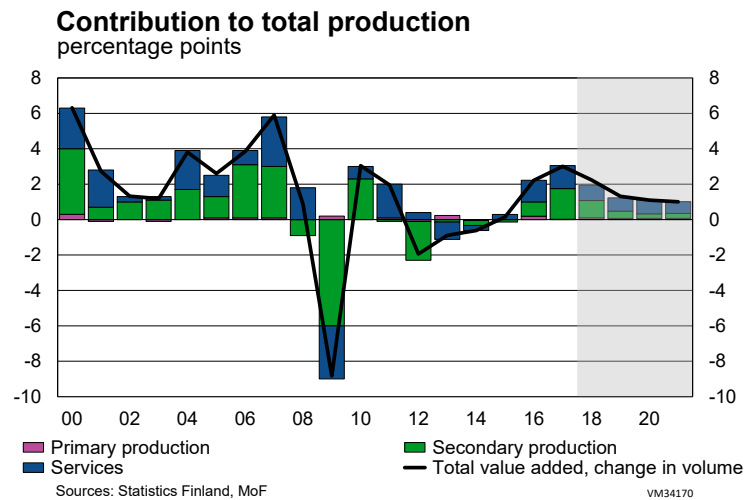
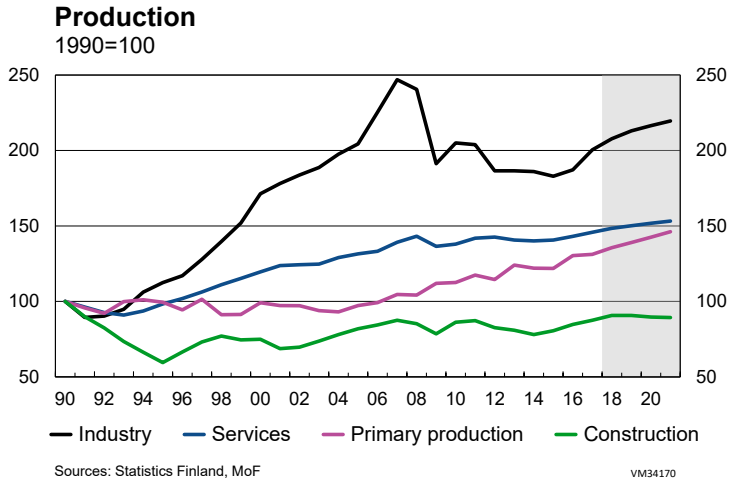
1.4 Domestic production

1.4.1 Total output

Economic growth will slow down substantially

Total output has increased in a broad range of sectors this year, but the growth has been slower than in 2017. Value added in secondary production (manufacturing and construction) has been growing at the fastest rate. At the same time, there has been a steady increase in value added in services. The gross value added for the economy increased by 2.3% in the first three quarters of the year, compared to the same period in 2017. Nevertheless, the gross value added remains about 1.5% lower than before the financial crisis because industrial production is still at a substantially lower level.

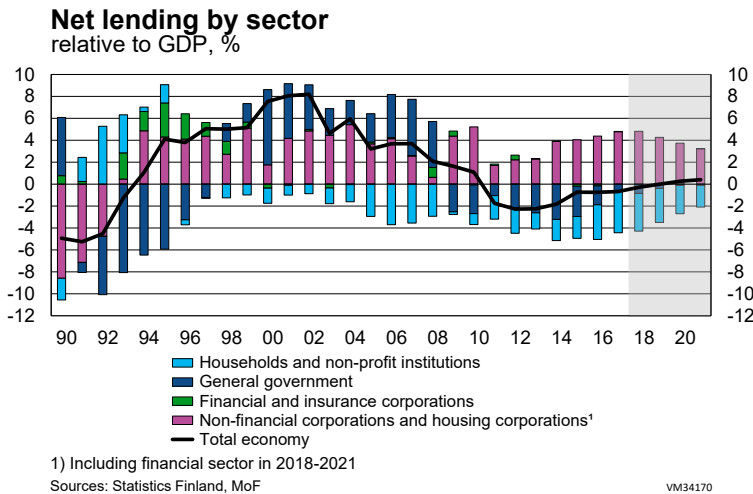
The year 2017 seems to have been the fastest period of growth in this cyclical upturn. This year, the outlook for output among manufacturing companies has already become more moderate, more barriers to growth have emerged, problems concerning the availability of labour force have increased in the construction sector and in services, and the number of new building permits is now on the decrease. In the coming years, international demand will provide less help for Finnish-based production.



Despite more factors hampering growth, the output will grow throughout the forecast period (until 2021) even though the growth will slow down towards the end of the period. This year and in 2019, the growth in industrial output will be the main factor contributing to the increase in gross value added as there has been a substantial increase in the value of new industrial orders. From then on, private service production will account for most of the economic growth.

The growth is driven by a solid order stock illustrating strong international demand in manufacturing, progress made in numerous private and public construction projects started, and economic restructuring, which is reflected in strong demand for

private services. Even though the period of the most rapid growth would seem to be over, surveys indicate that output and sales will remain brisk for at least another six months. In addition, the forecast's background assumptions concerning continuing growth in world trade and global economy support the growth prospects of export-oriented industrial production and therefore, indirectly, business services. Growing imports of Finland's most important trading area, Europe, are good news for Finnish industries manufacturing investment and intermediate products. Due to broad-based growth and a high level of activity, gross value added for the economy will grow by slightly more than two per cent this year. The rate of growth will slow down in the next few years but total output will still increase by about one per cent in 2021.

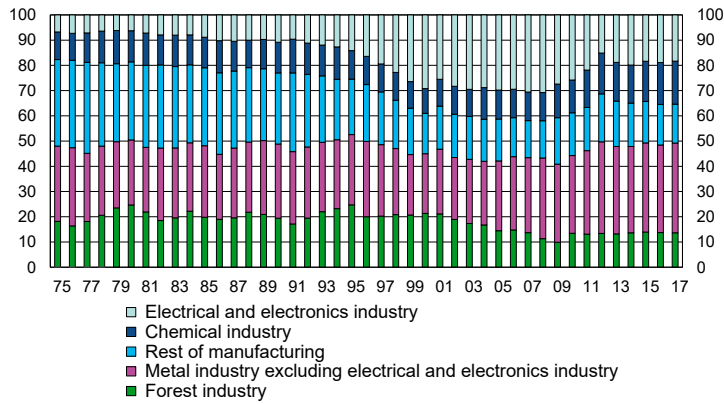


1.4.2 Secondary production

Growth driven by manufacturing output this year and in 2019

Industrial output increased in the first months of the year (first three quarters) by 3.4% on a year-on-year basis. Growth was particularly strong in the metal industry, and electrical and electronic industries performed especially well. There was also a rapid increase in the energy supply. At the same time, forest industry output was lower on a year-on-year basis even though its capacity increased substantially in the last months of 2017.

Manufacturing
% of gross value added



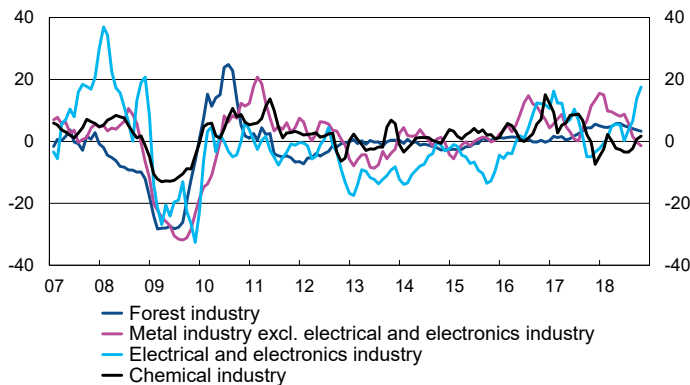
Source: Statistics Finland

VM34170

Raw materials and investment goods for export account for most of Finland's industrial output and the demand for these items has improved as the global economy and trade have picked up and capacity utilisation has been boosted by economic growth. Finnish companies were also able to improve their cost competitiveness in terms of unit labour costs last year because the labour costs in the economy as a whole per unit produced decreased by slightly more than two per cent in nominal terms. After a fall in 2017, there has been an increase in labour costs during the first months of this year. Productivity improvements have been modest, while at the same time, earnings are growing more rapidly. Industrial companies have an extremely strong order stock, especially in the forest, construction products and technology industries, and on average, this will guarantee the continuation of production for months.

Volume index for industrial production

3-month moving average, change yoy, %



Source: Statistics Finland

VM34170

According to business tendency surveys, chemical and technology industries have the best prospects for growth in the next few months. The outlook is weakest in the forest industry where the demand for pulp, paperboard and sawn timber is boosting the output, while at the same time, a global reduction in the demand for paper is reducing it. As a whole, industrial output will increase by about three per cent this year, a result of positive growth prospects and a strong order stock.

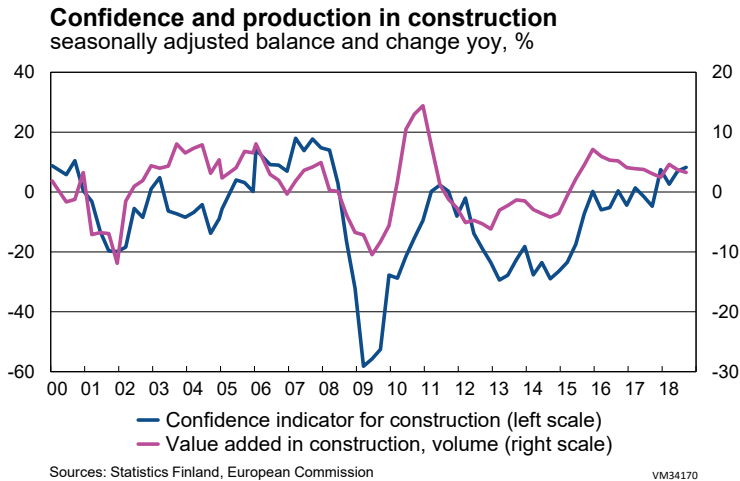
In the next few years, export demand will increase as world trade is expanding, even though the rate of growth is gradually slowing down. Imports are expected to increase in the coming years, especially in the European markets, which are important to Finnish companies. Increased production capacity and efforts by companies to improve the competitiveness of their products will boost industrial output in the years ahead. Industrial value added will increase, although at a reducing rate, so that in 2021, the rate of growth will be about 1.5%. Despite the growth, the volume of industrial output in 2021 will remain ten per cent lower than in the peak year of 2007.

Boom in new construction is coming to an end

Value added in construction has increased without interruption for three and a half years. The growth also continued in the first months of this year (+3.7%). The upward trend was supported by strong new building activity, whereas there was a decrease in civil engineering construction. Building construction was particularly strong, especially in housing and office construction. This was a result of a higher demand for housing in growth centres and companies' capacity expansion and replacement projects. The growth was, however, uneven in regional terms as there is more new construction in growth centres than outside them. The need for renovation construction is high, particularly in residential and office buildings.

According to surveys, the outlook in the construction sector no longer improved during the summer and the output expectations took a downward turn. Furthermore, there has also been a decrease in the number of building permits in the first months of the year. Many large buildings are nearing completion and some of them are one-off projects, which means that there will not be similar projects to replace them in the near future. Production is running at high level and almost all capacity in the sector is in use. The construction business is also the main sector with the most serious shortage of skilled labour. Supported by ongoing projects, the construction sector output will increase by 3.5% this year but construction is no longer the fastest-growing sector in the Finnish economy.

Busy construction activities will also continue in growth centres in the coming years but the number of new building permits suggests that there will be fewer new starts next year. In 2020 and 2021, the focus will be on renovations and a small number of large construction projects, which means that, as a whole, there will be a moderate decline in construction value added in these years.

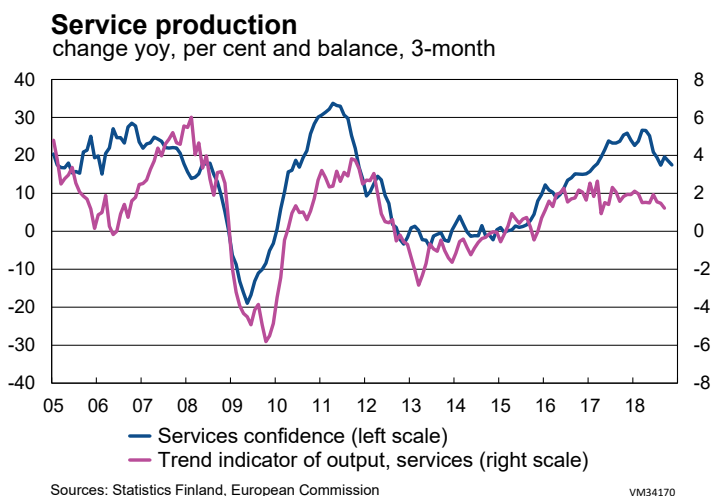


1.4.3 Services

Economic growth in 2020 and 2021 will be driven by private services

Service production has been growing for more than three years without interruption and in the early months of this year, the growth was still about two per cent. In the private sector, service value added increased at a rapid rate, whereas in the public sector, there was little growth. The growth was strongest in business services, with the exception of financing and insurance. Higher purchasing power also boosted the sales of consumer services.

The cyclical position of private services is strong. Sales are on the increase and are generally expected to continue to grow in the coming months. In fact, fewer service sector companies are suffering from a lack of demand. At the same time, however, the supply of skilled labour is considered a more serious obstacle to growth in the service sector, especially in ICT and real estate services. Nevertheless, companies in these sectors expect continuing sales growth during the last months of the year. The increase of value added in services this year will be almost two per cent year on year.



In the coming years, service production will be supported by demand in other sectors and growing household earnings. This means that there is still a solid basis for growth in the service sector. International demand is boosting service production meeting foreign demand, while through intermediate products it is also supporting service production meeting domestic demand. However, the sector is nearing the limits of its growth and, after a long period of strong growth, a slowdown is expected. In 2019 and in 2020, there will be a slight slowdown in service production growth and the average annual growth will be at one per cent.

Table 10. Production by industry

	2017	2016	2017	2018**	2019**	2020**	2021**	Average
	share, % ¹⁾	change in volume, %						2017/2007
Industry	21.1	2.3	7.1	3.5	2.5	1.6	1.4	-2.1
Construction	7.1	5.1	3.3	3.5	-0.0	-1.2	-0.3	-0.0
Agriculture and forestry	2.7	7.0	0.6	3.4	2.5	2.6	2.5	2.3
Industry and construction	28.2	3.0	6.1	3.5	1.9	0.9	1.0	-1.6
Services	69.1	1.7	1.9	1.8	1.1	1.1	1.0	0.5
Total production at basic prices	100.0	2.2	3.0	2.2	1.3	1.1	1.0	-0.2
GDP at market prices		2.5	2.8	2.5	1.5	1.3	1.1	0.0
Labour productivity in the whole economy		1.9	2.0	-0.2	0.6	0.6	0.9	0.1

1) Share of total value added at current prices.

1.5 Labour force

Employment to improve further in 2019

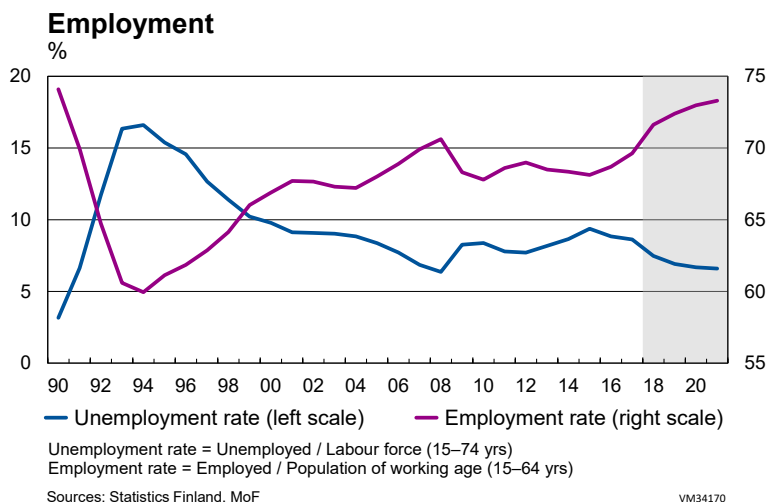
During 2018, the growth in employment has been more rapid than what could be concluded on the basis of the level of economic activity. According to the labour force survey, the number of employed persons grew by 2.7% in the period between January and October. In October, the trend of the employment rate stood at 71.8%.

This year, the hours worked have increased almost as much as the number of employed persons. It seems that there has only been a slight increase in temporary employment as a result of the activation model because according to the labour force survey, the proportion of part-time employment relationships of all employment relationships has grown little on a year-on-year basis.

The demand for labour is still increasing. According to Statistics Finland, the number of job vacancies in the third quarter of 2018 was substantially higher than a year before. According to the confidence indicators of the European Commission, the employment expectations of Finnish companies remained at extremely high level in October. However, when measured with the vacancy rate (the percentage of job vacancies of all jobs), Finland is only at average level among EU countries.

In 2018, the number of employed persons will be 2.5% higher than in the previous year. The employment rate for the whole of 2018 is expected to reach 71.6%.

According to the labour force survey of Statistics Finland and the employment service statistics of the Ministry of Economic Affairs and Employment, there has been a rapid decline in unemployment during 2018. In October, the trend of the unemployment rate stood at 7.2%. The number of unemployed has decreased in all regions and in all age groups. Driven by a rapid growth in employment, unemployment will fall substantially faster this year than in 2017. The projected unemployment rate for 2018 is 7.5%.



Despite a slowdown in economic growth, moderate growth in real earnings will maintain demand for labour force in 2019 and in 2020. Because of the fairly high number of unemployed and concealed unemployed, and the measures increasing the supply of labour, the supply of labour will not yet restrict the growth of employment and the economy as a whole. Tightness of the labour market (vacancy to job-seeker ratio) has exceeded the peak recorded during the previous upturn in 2008 but it still remains fairly low in Finland, compared with Sweden, Germany or the United States.

The number of employed persons will increase by 0.8% in 2019 and by 0.6% in 2020. The employment rate will reach 72.4% in 2019 and 73% in 2020. As economic growth is slowing down and as labour costs are continuing to rise, the growth in employment will come to halt in 2021.

The number of long-term and structurally unemployed is still well above the total recorded during the previous economic upturn in 2008. In 2018, there has been a substantial decrease in the number of these people, the 'hard core' of the unemployed, which will provide room for a decrease in the overall unemployment rate. The unemployment rate will fall to 6.9% cent in 2019 and further to 6.6% in 2021.

Even though the supply of labour is adequate in the economy as a whole, there are already shortages in specific professions. According to the business tendency survey published by the Confederation of Finnish Industries (EK) and the employment outlook by occupation published by the Ministry of Economic Affairs and Employment,

there is a shortage of construction and real estate service professionals as well as ICT and social and welfare sector experts.

The mismatch between the supply of and demand for labour can be removed by investing in skills and training, by providing more incentives for work and by increasing work-based immigration. Ultimately, the mismatch will lead to higher pay levels in the sectors suffering from labour shortages.

Table 11. Labour market

	2016	2017	2018**	2019**	2020**	2021**
	annual average, 1,000 persons					
Population of working age (15–74 yrs)	4109	4114	4123	4130	4131	4123
change	7	5	9	7	1	-8
Population of working age (15–64 yrs)	3463	3451	3439	3431	3423	3416
change	-13	-12	-12	-8	-8	-7
Employed (15–74 yrs)	2448	2474	2535	2556	2571	2577
of which 15–64 yrs	2379	2403	2463	2484	2498	2504
Unemployed (15–74 yrs)	237	234	205	190	184	182
	%					
Employment rate (15–64 yrs)	68.7	69.6	71.6	72.4	73.0	73.3
Unemployment rate (15–74 yrs)	8.8	8.6	7.5	6.9	6.7	6.6
	1,000 persons per annum					
Immigration, net	16	17	15	15	15	15

1.6 Incomes, costs and prices

1.6.1 Wages and salaries

Negotiations on pay rises for 2018 and 2019 took place in each industry separately. The increases specified in the agreements are mostly in accordance with the settlements reached in the technology industry. The wage drifts coming on top of the pay rises specified in the agreements will grow slightly faster in 2019, but they will nevertheless remain at moderate levels, considering the economic upturn. Nominal earnings are expected to grow by 1.8% in 2018 and 2.7% in 2019.

As the employment is improving and nominal earnings increasing, the total sum of wages and salaries is predicted to grow by 4.6% in 2018 and 3.5% in 2019.

As unemployment is falling and the mismatch between the supply of and the demand for labour force is increasing, the rate of growth in earnings is expected to approach the annual rate of three per cent, the average for the past 18 years. Reinstatement of the holiday bonuses in the public sector will also temporarily boost earnings in 2020, and as a result, nominal earnings are expected to grow by 3.0% and the sum of wages and salaries by 3.6%. In 2021, nominal earnings will grow by 2.8% and the sum of wages and salaries by 3.0%.

Table 12. Disposable income

	2017	2016	2017	2018**	2019**	2020**	2021**	Average
	share, %	change, %						2017/2007
Compensation of employees	57.3	1.7	0.7	3.7	2.9	3.8	2.7	2.0
Wages and salaries	47.0	1.4	2.2	4.6	3.5	3.6	3.0	2.2
Employers' contributions to social security schemes	10.3	2.5	-5.9	0.1	-0.8	4.4	1.4	1.0
Property and entrepreneurial income, net	28.2	9.0	11.8	6.9	6.1	4.2	4.2	0.9
Taxes on production and imports minus subsidies	15.7	5.9	1.5	3.3	2.9	2.1	2.2	3.1
National income	100.0	4.1	3.7	4.6	3.7	3.6	3.1	1.8
Disposable income		3.7	3.6	4.3	3.5	3.4	3.0	1.8
Gross national income, EUR bn		219.2	226.5	236.2	244.4	252.7	260.2	

Table 13. Index of wage and salary earnings and labour costs per unit of output

	2016	2017	2018**	2019**	2020**	2021**	Average
	change, %						2017/2007
Index of negotiated wage rates	0.6	-0.3	1.2	2.0	2.3	2.1	1.4
Wage drift, etc.	0.3	0.5	0.6	0.7	0.7	0.7	0.5
Index of wage and salary earnings	0.9	0.2	1.8	2.7	3.0	2.8	2.4
Real earnings ¹	0.5	-0.6	0.7	1.3	1.4	1.0	0.9
Average earnings ²	0.7	0.3	2.1	2.8	3.1	2.9	2.3
Labour costs per unit of output whole economy ³	-0.6	-2.3	1.5	1.4	2.6	1.7	2.2

1) The index of wage and salary earnings divided by the consumer price index.

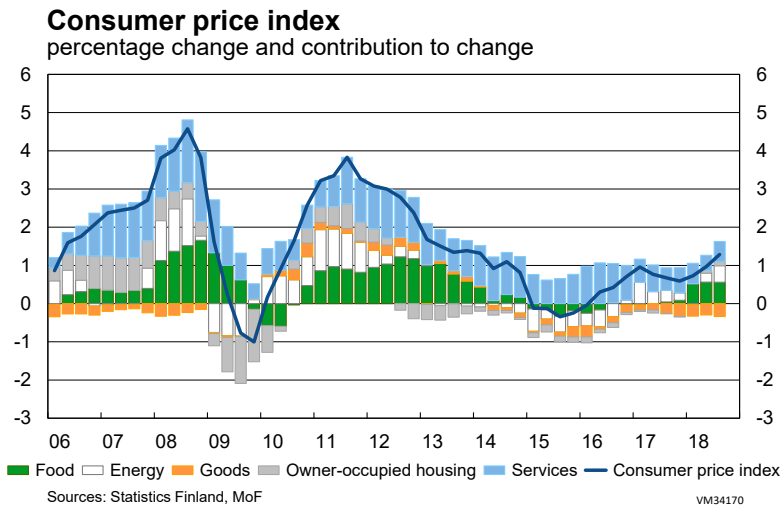
2) Computed by dividing the national wage bill by the number of hours worked by wage and salary earners. The figures are affected by structural changes in the economy.

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

1.6.2 Consumer prices

The inflation rate has accelerated significantly during 2018, compared with the previous year. In October, the yearly change in the national consumer price index was already 1.5%, compared with 0.5% a year earlier. Especially the rise in energy prices have contributed to the increase in consumer prices. This year, oil prices have been higher than in 2017 but electricity prices have also been on the increase since the middle of the year. The rise in prices has been more broadly based than in 2017, which is partially the result of changes in indirect taxation, which will boost inflation by an estimated 0.4 percentage points. The projected inflation for 2018 is 1.2% measured by the national consumer price index.

A slight slowdown in inflation is expected in the early months of 2019, as the baseline impact of energy prices is weakening and because of the recent fall in crude oil prices. The oil price has declined substantially during the last quarter of 2018, compared with the previous quarter, but the price is nevertheless expected to increase moderately in the forecast period.



An inflation rate of 1.4% is projected for 2019. The inflation is boosted by increases in service, food and energy prices, whereas the prices of goods will have a negative impact on inflation (as in 2018). As earnings are rising, prices of services are expected to increase more rapidly than this year. Supported by the indirect impacts of pay rises and higher energy prices, food prices are also expected to rise further.

As a whole, inflationary pressures are expected to grow only slowly in the later years of the forecast period. A gradual acceleration in service price increases is expected in the forecast period, as pay rises will be passed through to prices. Consumer demand and raw material prices will increase only moderately, however. Euro area market rates are expected to increase, which will help to slow down inflationary pressures. The national consumer price index is expected to rise by 1.6% in 2020 and by 1.7% in 2021.

Driven by energy prices, euro area inflation accelerated to more than two per cent in the third quarter of 2018. However, the inflation is expected to slow down to below two per cent in the early months of 2019. Baseline inflation remains at moderate level and the view is that no significant increase is expected in the coming years. According to the survey of professional forecasters conducted by the European Central Bank, euro area inflation is expected to remain at 1.7% between 2018 and 2020. In 2018, the inflation rate in Finland has been below euro area average, mainly due to slow increases in goods prices. The inflation is also expected to remain slightly below euro area average in the forecast period.

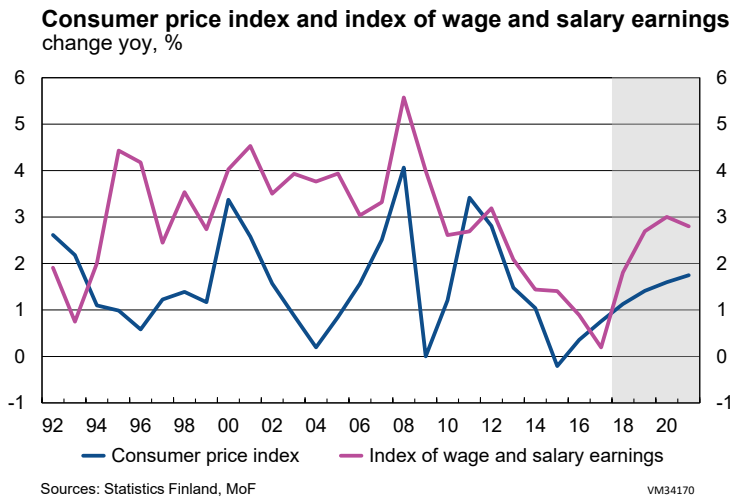


Table 14. Price indices

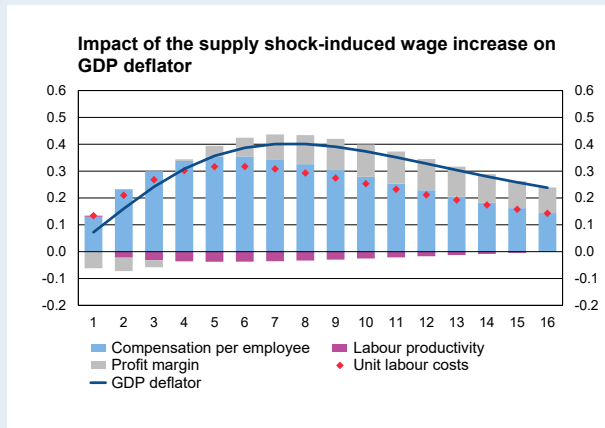
	2016	2017	2018**	2019**	2020**	2021**	Average
	change, %						2017/2007
Export prices ¹	-2.1	3.1	3.4	2.6	2.0	1.5	0.2
Import prices ¹	-2.5	3.5	3.8	3.3	2.3	1.7	0.2
Consumer price index	0.4	0.7	1.2	1.4	1.6	1.7	1.5
Harmonised index of consumer prices	0.4	0.8	1.2	1.5	1.6	1.7	1.8
Basic price index for domestic supply, including taxes	-1.2	5.2	5.0	3.4	2.3	2.0	1.5
Building cost index	0.5	0.3	2.3	2.5	2.4	2.4	1.3

¹ As calculated in the National Accounts

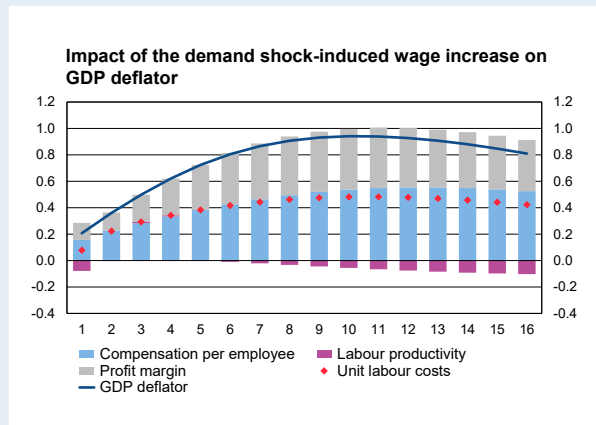
BOX: ROLE OF WAGES AND SALARIES IN THE ACCELERATION OF INFLATION

The relationship between pay levels and inflation is an interesting one, and labour cost indicators are commonly used in price level forecasts. In the current situation, a rise in earnings is considered a prerequisite for a higher baseline inflation rate in the euro area. However, the link between wages and prices is not a straightforward one as it depends on a number of background factors, such as whether the increases in wages and salaries depend on supply or demand factors.

In this box, we examine the impact of shocks on prices in Finland, using the KOOMA model of the Ministry of Finance. To be more precise, we examine the impact of supply and demand shocks on the GDP deflator and its components. We use the wage markup shock as the supply shock and the risk premium shock as the demand shock. The European Central Bank has recently examined the issue for the euro area as a whole using the New Area-Wide Model (NAWM) DSGE model (ECB Economic Bulletin, Issue 5 / 2018).



A typical negative supply shock in the labour market pushes both wages and unit labour costs upwards but reduces profit margins in the short term. Figure 1 shows the impacts of a shock affecting the wage margin on GDP deflator and its components. In the figure, the impacts are described as deviations from the equilibrium path of the economy on a quarterly basis. As a result of the shock, wage costs and, consequently, the costs incurred by companies, as well as prices will increase. This will lead to a fall in demand, production and employment. As a result of a falling demand curve and price inelasticity, companies cannot, however, pass all cost increases through to prices immediately. For this reason, profit margins will fall in the short term, relative to the baseline. Unit labour costs will rise slightly slower than wages because there is a slight improvement in work productivity. As the improvements in work productivity will cause prices to fall, the growth is shown in reverse.



The reaction of wages and unit labour costs to the demand shock is different from the supply shock described above. Figure 2 describes the impact of the risk premium shock on wages and the way in which it is transmitted to GDP deflator. The demand shock will lead to higher output and a higher demand for capital and work inputs, which will boost both wages and employment. As demand increases, companies can raise prices and profit margins grow. The shock will also boost work productivity, in which case unit labour costs will rise more slowly than wage costs. This will further increase profits.

Basically, the analysis shows that the source of the shocks is relevant when wage trends are transmitted to prices. As a result of the demand shock, prices will react more strongly than wages, whereas in a supply shock, prices will react less strongly than wages in the short term.

2 Public finances

2.1 General government finances

Favourable economic cycle has improved Finland's public finances. Government decisions curbing expenditure growth have also helped to shrink the deficit. The economy will still perform reasonably well in 2019, when general government budgetary position will be in balance. In the early years of 2020s economic growth will slow down to below one per cent and general government budgetary position will also start weakening again.

General government debt to GDP ratio will fall below 60% in 2018. In nominal terms, however, debt will still increase. Despite steady economic growth, the debt ratio has improved extremely slowly. Fiscal buffers built for future downturns remains very thin. For example, after the previous financial crisis, the debt ratio increased by more than 30 percentage points.

When the impact of cyclical factors are eliminated from the financial balance, the public finances is still structurally in deficit. Furthermore, the positive economic cycle conceals the structural problems of general government finances. The population ageing increases health care and long-term care expenditure. In the 2020s, general government finances need to show a clear surplus in order to reach a more sustainable foundation required to meet the pressure caused by population ageing.

Central government is the sector of public finances with the largest deficit. During the outlook period, the deficit will contract due to tax revenue growth and moderate expenditure growth. Cyclical fluctuations have the greatest impact on central government financial balance, mainly because the high cyclical sensitivity of tax revenue. Local government deficit will increase in 2018 because tax revenue will

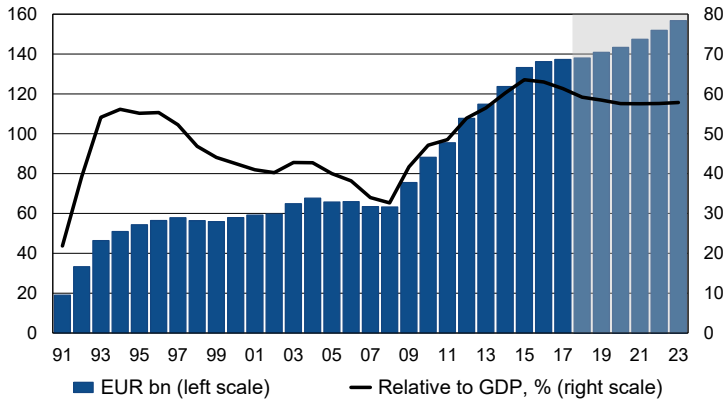
decrease from the previous year, and at the same time consumption expenditure and investments will increase. Local government tax revenue will decrease in 2018 because the favourable one-off factors which were affecting last year will disappear. The deficit will shrink gradually in the next few years.

In 2021, some of the duties of local government will be transferred to the counties due to the health, social services and regional government reform. Initially, county government will be in deficit. The county government deficit will be largely due to the large number of facilities investment decisions already made earlier by hospital districts. These investments will be transferred to the Counties' Service Centre for Facilities and Real Estate Management.

The employment pension schemes, which are part of the social security funds, are in surplus. The surplus of the schemes will remain at slightly less than one per cent in the forecast period. Even though pension expenditure will grow rapidly, the favourable economic development will increase revenues from the contributions and higher interest rates are boosting property income. Other social security funds have a slight surplus. Unemployment expenditure is expected to fall further and the unemployment insurance contributions will be lowered in the forecast period. Lowering the contributions will shrink the surplus of other social security funds and as a result, they will be in balance.

The expenditure rate (expenditure to GDP ratio) will decrease in the next few years. The expenditure rate will be reduced by the adjustment measures outlined in the Government Programme and as a result of the fall in unemployment expenditure. At the same time, the tax rate (taxes and tax-like payments relative to GDP) has decreased as a result of the Competitiveness Pact and tax cuts. The tax rate will remain more or less unchanged in the next few years.

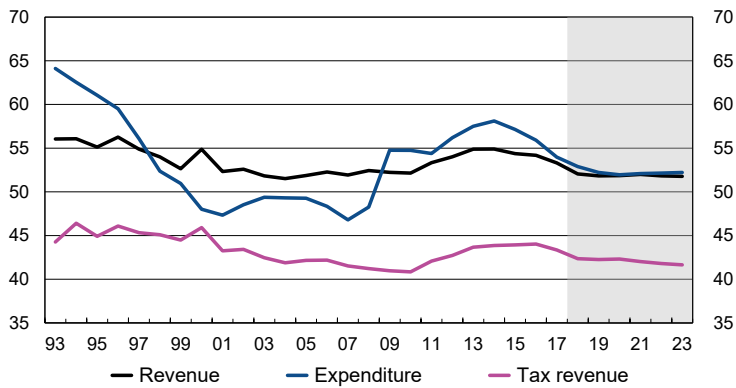
General government debt



Sources: Statistics Finland, MoF

VM34098

General government revenue, tax revenue and expenditure relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

Table 15. General government finance¹⁾

	2016	2017	2018**	2019**	2020**	2021**
	EUR billion					
Current taxes	35.6	37.2	37.4	39.4	40.6	41.9
Taxes on production and imports	31.1	31.5	32.6	33.3	33.9	34.4
Social security contributions	28.0	27.4	28.2	28.5	30.1	30.5
Taxes and contributions, total ²⁾	95.2	97.0	98.8	101.9	105.3	107.6
Other revenue ³⁾	22.5	23.2	23.3	23.8	24.5	26.3
of which interest receipts	1.9	1.8	1.8	2.0	2.1	2.3
Total revenue	117.1	119.3	121.4	124.9	129.1	133.2
Consumption expenditure	51.6	51.2	52.8	54.2	56.1	57.8
Subsidies	2.7	2.7	2.7	2.7	2.6	2.6
Social security benefits and allowances	42.2	42.7	43.3	44.3	45.4	46.8
Other current transfers	5.7	5.3	5.4	5.5	5.7	5.9
Subsidies and current transfers, total	50.6	50.7	51.3	52.5	53.8	55.3
Capital expenditure ⁴⁾	9.2	9.4	10.1	9.8	10.0	9.8
Other expenditure	9.4	9.5	9.2	9.3	9.5	10.6
of which interest expenses	2.3	2.2	2.1	2.1	2.1	2.2
Total expenditure	120.8	120.8	123.4	125.9	129.3	133.4
Net lending (+) / net borrowing (-)	-3.7	-1.5	-2.0	-0.9	-0.3	-0.3
Central government	-5.7	-4.0	-3.1	-1.6	-1.7	-0.7
Local government	-0.9	-0.3	-1.4	-1.3	-1.0	-0.9
Employment pension schemes	2.4	2.0	2.1	2.0	2.2	2.3
Other social security funds	0.5	0.8	0.4	-0.1	0.2	-0.0
Primary balance ⁵⁾	-3.3	-1.0	-1.7	-0.8	-0.2	-0.3

1) As calculated in the National Accounts

2) Incl. capital taxes

3) Incl. capital transfers and consumption of fixed capital

4) Gross fixed capital formation and capital transfers

5) Net lending before net interest expenses

Table 16. Main economic indicators in general government

	2016	2017	2018**	2019**	2020**	2021**
	relative to GDP, %					
Taxes and social security contributions	44.0	43.3	42.3	42.2	42.3	42.0
General government expenditure ¹	55.9	54.0	52.9	52.2	52.0	52.1
Net lending	-1.7	-0.7	-0.8	-0.4	-0.1	-0.1
Central government	-2.7	-1.8	-1.3	-0.7	-0.7	-0.3
County government						-0.4
Local government	-0.4	-0.1	-0.6	-0.5	-0.4	-0.4
Employment pension institutions	1.1	0.9	0.9	0.8	0.9	0.9
Other social security funds	0.2	0.3	0.2	-0.0	0.1	-0.0
Primary balance ²	-1.5	-0.4	-0.7	-0.3	-0.1	-0.1
General government debt	63.0	61.3	59.2	58.4	57.6	57.5
Central government debt	47.4	47.3	45.0	44.5	43.8	43.8
General government employment, 1000 person	614	619	619	618	615	615
Central government	131	131	132	132	130	124
County government						231
Local government	472	476	476	474	474	249
Social security funds	11	11	11	11	11	11

1) EU-harmonized definition

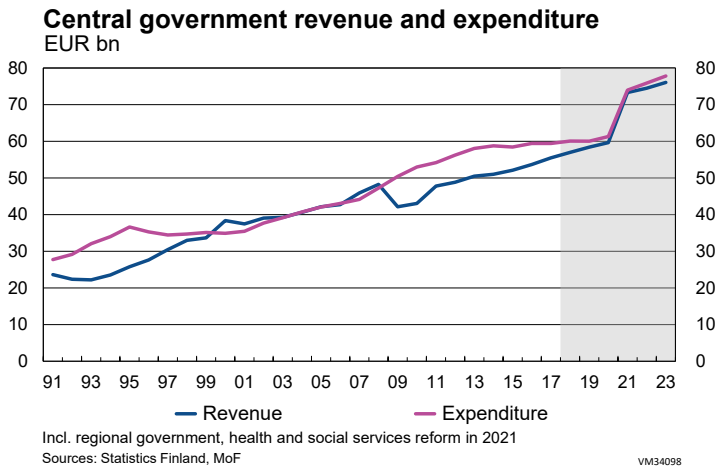
2) Net lending before net interest expenses

2.2 Central government

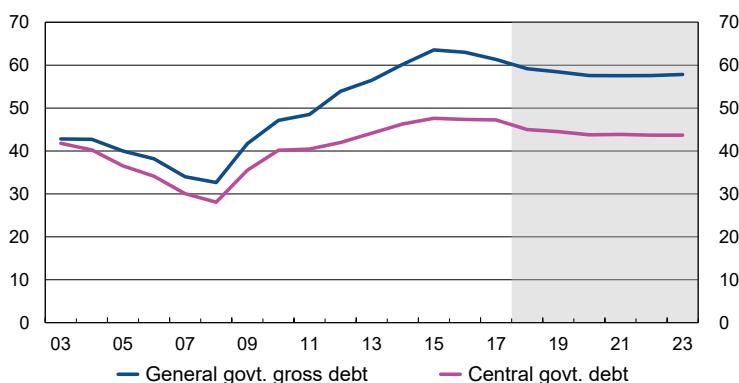
Central government deficit has narrowed in recent years and the trend will continue in 2018 and 2019. Higher tax revenue (especially income tax and VAT revenue) is the main reason behind the improved budgetary position. As more people are working, the amount of taxes collected from earned income is also increasing. The adjustment measures outlined in the Government Programme the impacts of which will be felt gradually, and the fact that the Government's key projects will no longer boost expenditure in 2019 are also curbing spending growth. The cuts in employer's contributions introduced as part of the Competitiveness Pact and the temporary cuts in holiday bonuses have reduced the employee compensations paid by the state in recent years. Correspondingly, the elimination of the temporary cuts in holiday bonuses will increase employee compensations in 2019.

There will no longer be any improvement in the budgetary position in 2020 as a slowdown in economic growth will also mean slower growth in tax revenue. Moreover, transfers to local government will increase, which is partly a result of the compensation for the cuts in holiday bonuses laid out in the Competitiveness Pact. At the end of the forecast period, In 2021 total revenue will be growing more rapidly than the expenditure, which will again cut central government deficit. However, a slowdown in economic growth at the start of the following decade will lead to a weakening of the budgetary position.

Central government revenue and expenditure structures will start changing in 2021 when the county-level government is introduced. Central government tax revenue will increase as some of taxes now paid to municipalities will be paid to the state. At the same time, central government expenditure will also increase as most of the county-level operations are financed from state funds.



General government debt relative to GDP, %



Sources: Statistics Finland, MoF

VM34098

Table 17. Central government¹

	2016	2017	2018**	2019**	2020**	2021**
	EUR billion					
Current taxes	13.7	14.4	15.0	15.6	16.1	29.1
Taxes on production and imports	31.1	31.5	32.6	33.3	33.9	34.4
Social security contributions	0.0	0.0	0.0	0.0	0.0	0.0
Taxes and social security contributions, total ²	45.3	46.9	48.2	49.6	50.7	64.3
Other revenue ³	8.7	8.7	8.9	8.9	9.1	9.1
of which interest receipts	0.3	0.3	0.3	0.3	0.4	0.4
Total revenue	54.0	55.6	57.1	58.5	59.7	73.4
Consumption expenditure	14.0	13.4	13.8	14.1	14.4	14.3
Subsidies and current transfers, total	38.8	39.5	39.4	39.6	40.5	53.4
to general government	27.1	28.1	27.9	27.9	28.6	41.6
Interest expenses	2.2	2.1	1.9	1.9	1.9	2.0
Capital expenditure ⁴	4.8	4.6	5.1	4.6	4.6	4.4
Total expenditure	59.7	59.6	60.2	60.1	61.4	74.1
Net lending (+) / net borrowing (-)	-5.7	-4.0	-3.1	-1.6	-1.7	-0.7
Primary balance ⁵	-3.8	-2.1	-1.5	-0.1	-0.1	0.9

1) As calculated in the National Accounts

2) Incl. capital taxes

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

4) Gross fixed capital formation and capital transfers

5) Net lending before net interest expenses

2.3 County government

County government will be introduced in 2021. For the purposes of the forecast for general government finances, counties have been singled out as a separate subsector starting from that year. The responsibility for organising health and social services will be transferred from municipalities to counties, and counties will also assume responsibility for a number of other tasks that are now performed by central and local government. The county sector included in the forecast covers the counties themselves and the nationwide service centres owned by them (such as the Counties' Service Centre for Facilities and Real Estate Management).

Health and social services will account for most of the county-level expenditure. The expenditure will total about EUR 25.3 billion in 2021. The changing age structure will create pressures in county-level expenditure as the need for health and social services among the ageing population will grow.

Counties will receive most of their funding from central government. Central government funding will comprise universal funding and value-added tax refunds. In addition, the counties will also receive sales and fee revenue from service users, totalling about EUR 3.1 billion. County revenue is expected to total about EUR 24.3 billion in 2021. Central government funding provided to counties will be in accordance with the county index and annual funding reviews.

The budgetary position of the county sector will be in deficit. This is mainly due to the facilities projects currently underway in hospital districts, which will be transferred under the responsibility of the Counties' Service Centre for Facilities and Real Estate Management.

The counties' revenue and expenditure (excluding investment) will be in balance in the first year of operations but the balance will weaken in the subsequent years. Halving of the county index in 2022 is one of the factors weakening the balance. The forecast does not contain assumptions on counties' consolidation measures or operational efficiency improvements as the expenditure and funding follow their respective paths. The forecast is a pressure projection.

The county sector's investments in 2021 will be at a high level, totalling about EUR 0.9 billion. The level will start falling after that as major investment projects

are completed. In addition to hospital construction projects, county government investments will also be sustained by health and social services ICT development projects. In addition to properties and other assets, a significant amount of debt will also be transferred from hospital districts to the county sector. County sector debt is estimated to total about EUR 5.1 billion at end of 2021. The debt will grow each year by the amount of the sector's deficit.

The counties will initially incur additional expenditure from launching and organising their activities. The forecast is not yet able to take into account the transition costs because of their uncertainty and quantitative inaccuracy.

Table 18. County government

	2021**
	EUR billion
Transfers from central government	21.0
Other revenue	3.3
Total revenue	24.3
Consumption expenditure	20.5
Current transfers and other expenditure	1.0
Capital expenditure	0.9
Total expenditure	25.3
Net lending (+) / net borrowing (-)	-0.9

2.4 Local government

The financial situation of local government has improved considerably in recent years, but in 2018, there will be a weakening in its budgetary position. This year, local government revenue will remain more or less at previous year's levels. In fact, municipal tax revenue will fall from 2017, a result of exceptionally high large pre-paid tax refunds, the downward adjustment of municipalities' apportionment and a large one-off item relating to corporation tax in 2017. At the same time, consumption expenditure will increase more rapidly than in the past few years. They are boosted by a growth in age-related care and nursing expenditure, reduction in day-care fees, preparation of the regional government, health and social services reform and rising earnings in local government.

There will be a slow reduction in the local government deficit between 2019 and 2021. In 2019, the expenditure will be increased by growing health and social service needs, as well as by municipal-sector pay rises and the expiry of the holiday bonus cut under the Competitiveness Pact, which will already have its largest impact in 2019. Busy hospital construction will also keep capital expenditure at a high level. Local government revenue will, however, increase faster than expenditure when tax revenue growth picks up in 2019. Municipalities' tax revenue growth will be boosted by the one-off tax revenue increase in 2019 resulting from the bringing forward of back tax payments and the 0.04 percentage point rise in the average municipal tax rate to 19.88%. There will be a reduction in government aid in 2019 due to such factors as the revision of the division of costs between central and local government. In accordance with the Government Programme, no index adjustment will be made to central government transfers to municipalities in 2019 either.

There will be further improvements in local government budgetary position in 2020. Central government transfers to local government in particular are expected to increase substantially as municipalities will receive a compensation of about EUR 240 million for the holiday bonus cut laid out in the Competitiveness Pact so that the cut would not be taken into account twice in transfers to local government. Central government transfers to local government will also be increased by the partial elimination of the cuts laid out in the Competitiveness Pact and the index increase in central government transfers to local government.

For many years, the ageing of the population has increased the need for care and nursing services, adding to expenditure pressures in local government. The growth pressures on local government consumption expenditure will, however, be eliminated from 2021 onwards as a result of the health and social services reform. Following the reform, the focus in local government tasks will increasingly be on services for the younger age groups, such as early childhood education and other education and training. According to the latest population projection of Statistics Finland, the number of young people is on the decline, which means that the consumption expenditure on early childhood education and other education and training is expected to decrease. This will require that the number of daycare centres and schools is measured in accordance with the shrinking demand in the municipalities where the need for services is declining. However, the local government budgetary position will still be in the deficit in 2021. The nominal local government

debt will increase between 2018 and 2020, but in 2021 the debt will decrease as EUR 4.1 billion of hospital districts' debt will be transferred to county government.

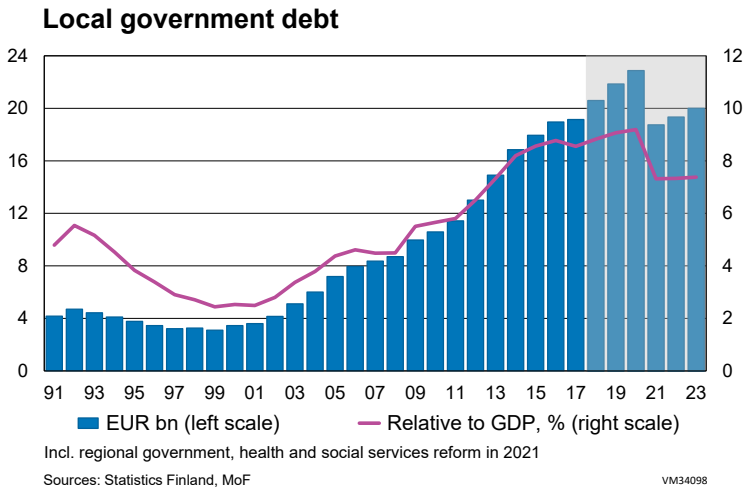
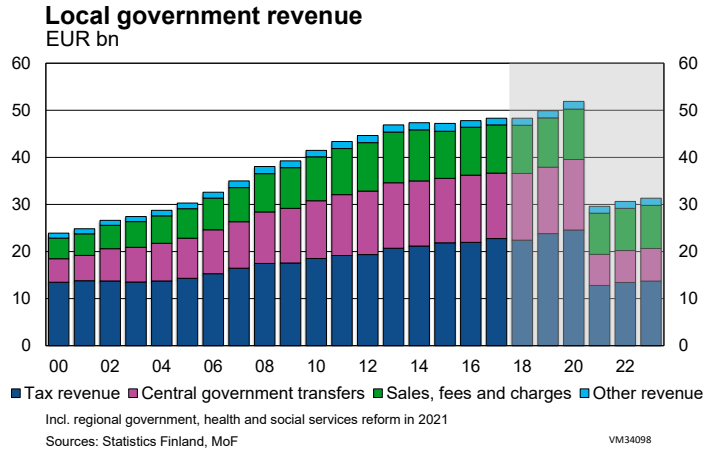


Table 19. Local government¹

	2016	2017	2018**	2019**	2020**	2021**
	EUR billion					
Taxes and social security contributions	22.0	22.8	22.4	23.8	24.6	12.8
of which municipal tax	18.7	19.1	18.8	20.0	20.6	9.3
corporate tax	1.5	1.9	1.8	2.0	2.0	1.6
real estate tax	1.7	1.8	1.8	1.8	1.9	1.9
Other revenue ²	19.0	18.7	19.2	19.3	20.4	11.7
of which interest receipts	0.3	0.3	0.3	0.3	0.3	0.3
transfers from central government	14.3	13.9	14.2	14.1	15.0	6.6
Total revenue	40.9	41.5	41.6	43.1	45.0	24.5
Consumption expenditure	34.0	34.2	35.2	36.3	37.6	18.8
of which compensation of employees	21.6	21.0	21.2	21.6	22.1	11.7
Income transfers	3.3	2.8	2.7	2.7	2.8	2.0
of which social security benefits and allowances	1.4	0.8	0.8	0.7	0.8	0.1
subsidies and other transfers	1.8	1.9	1.8	1.8	1.8	1.7
interest expenses	0.1	0.1	0.1	0.2	0.2	0.2
Capital expenditure ³	4.5	4.9	5.1	5.4	5.6	4.5
Total expenditure	41.8	41.8	43.0	44.3	46.0	25.4
Net lending (+) / net borrowing (-)	-0.9	-0.3	-1.4	-1.3	-1.0	-0.9
Primary balance ⁴	-1.1	-0.4	-1.6	-1.4	-1.1	-1.0

1) As calculated in National Accounts

2) Incl. capital transfers and consumption of fixed capital

3) Gross capital formation and capital transfers

4) Net lending before net interest expenses

2.5 Social security funds

The surplus of employment pension schemes fell to 0.9% of the GDP in 2017, compared to an average of just over three per cent in the first decade of the 2000s. The surplus of the employment pension schemes is expected to remain more or less at 2017 levels throughout the forecast period. Steady economic growth has helped to increase pension contribution revenue but it will not be enough to improve the budgetary position of the employment pension schemes. This is because the rapid rise in pension expenditure will continue as the number of pensioners is increasing and further rises in average pensions are expected. Property income of employment pension schemes will return to a moderate growth path in the forecast period. It has been agreed that private-sector pension contribution will remain at its current level (24.4%) throughout the forecast period.

Other social security funds comprise the Social Insurance Institution (Kela), which is mainly responsible for basic security, and the units managing earnings-related unemployment security schemes. The surplus of the other social security funds increased to 0.3% of the GDP in 2017. The finances of other social security funds will balance during the forecast period. Unemployment expenditure will fall further as the employment situation is continuing to improve. At the same time, a more rapid growth in the national wage bill will increase the social security contributions received. At the same time, however, a cut of 0.8% in the unemployment insurance contribution at the start of 2019 will cause a substantial reduction in the revenue of other social security funds. In the situation presented by the forecast, the unemployment insurance contribution should, under the current legislation, be lowered still further and the reduction should be introduced by 2021. Thus, the assumption is that the unemployment insurance contribution would be cut by 0.4 percentage points from 2021.

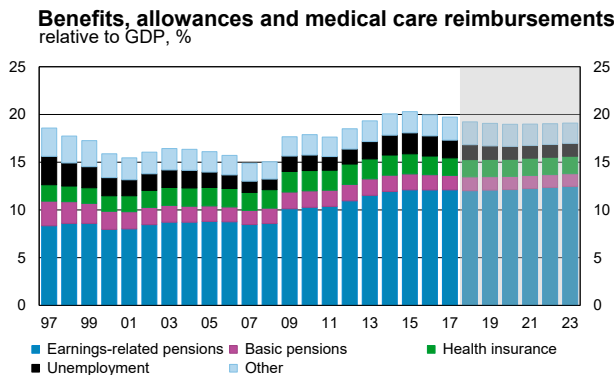


Table 20. Finances of social security funds¹

	2016	2017	2018**	2019**	2020**	2021**
	EUR billion					
Investment income	3.5	3.7	3.9	4.1	4.4	4.9
Social security contributions	27.9	27.4	28.1	28.4	30.1	30.5
of which contributions paid by employers	18.8	17.7	17.7	17.6	18.4	18.7
contributions paid by insured	9.2	9.7	10.5	10.9	11.6	11.8
Transfer from general government	14.6	15.8	15.2	15.2	15.0	15.4
Other revenue	0.5	0.4	0.4	0.4	0.4	0.4
Total revenue	46.5	47.3	47.7	48.2	49.9	51.1
Consumption expenditure	3.6	3.6	3.8	3.9	4.0	4.1
Social security benefits and allowances	36.6	37.6	38.1	39.0	40.0	41.3
Other outlays	3.4	3.4	3.3	3.4	3.4	3.5
Total expenditure	43.6	44.5	45.1	46.2	47.4	48.9
Net lending (+) / net borrowing (-)	2.9	2.8	2.6	2.0	2.4	2.3
Earnings-related pension schemes	2.4	2.0	2.1	2.0	2.2	2.3
Other social security funds	0.5	0.8	0.4	-0.1	0.2	-0.0
Primary balance ²	1.6	1.6	1.4	0.6	1.0	0.7

1) As calculated in the National Accounts.

2) Net lending before net interest expenses.

2.6 Long-term sustainability of public finances

Even though the general government debt to GDP ratio is expected to decline further in the next few years, ageing of the population is creating significant pressures to ensure the long-term sustainability of public finances. An increase in the ageing population will mean higher pension, health and long-term care expenditure, for which the current overall tax rate will be insufficient in the future. Moreover, the working-age population, which is financing Finland's welfare services and social security through taxes, is shrinking. A permanent imbalance between revenue and expenditure (sustainability gap) is threatening to increase Finland's indebtedness to unmanageable levels in the long run.

The Ministry of Finance estimates the sustainability gap at nearly four per cent of GDP. The method for calculating the sustainability gap has been changed slightly since the previous estimate published in September 2018. The estimate of the long-term real interest rate on general government debt has been lowered from three to two per cent and the method of calculating property income has been made more

specific. However, these changes have only had a limited impact on the size of the estimated sustainability gap. At the same time, the sustainability gap estimate has been substantially reduced by the fact that a new and more accurate method has been introduced to estimate trends in educational spending. These new methods are presented in more detail in the description of the method used by the Ministry of Finance in the calculation of the sustainability gap.¹

The latest population projection published by Statistics Finland in November 2018 has been taken into account in the sustainability gap calculation for the first time. The lower total fertility rate and net migration assumptions presented in the population projection will cause a slight increase in the sustainability gap, compared with previous estimates. A more important factor increasing the sustainability gap is, however, the fact that the population projection extends to the year 2070. As a result, the estimate on trends in age-related expenditure has, in accordance with EU calculations, been extended by ten years. The extension will increase the sustainability gap because pension expenditure in particular will be on a growth path in the 2060s. The medium-term estimate of public finances has led to a slight increase in the estimated sustainability gap, compared with last autumn. The changes impacting the sustainability gap estimate are illustrated in the figure below.

Only the decisions whose impacts on public finances can be estimated with sufficient accuracy are considered in the sustainability gap estimate. This means that the sustainability gap calculation does not yet take into account the long-term measures aimed at consolidating public finances and outlined in the Government Programme, such as the health and social services reform. Achieving the objectives set for the health and social services reform are uncertain because they depend on the practical implementation of the reform.

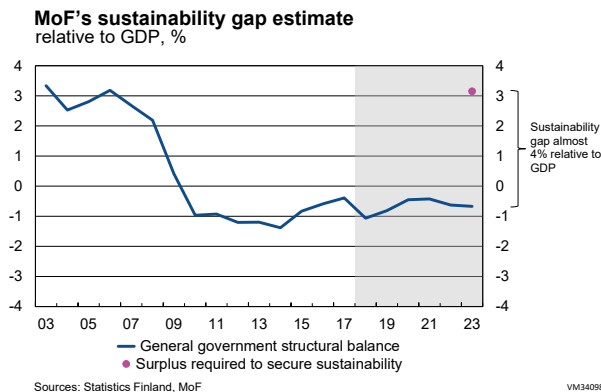
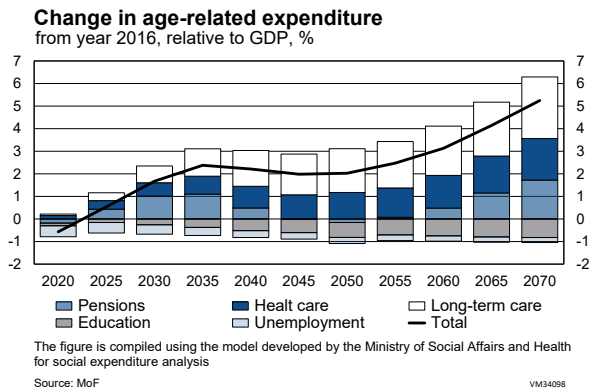
The sustainability gap can be technically expressed as the difference between the surplus safeguarding the sustainability of public finances and general government structural deficit in the base year of the calculation (currently 2023) (see the figure below). The surplus safeguarding sustainability means that public finances should be approximately three per cent in surplus relative to GDP at the beginning of the next decade in order to cope with the expenditure pressures arising from population ageing in the coming decades without additional measures. Instead of posting a

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

surplus of three per cent, public finances are expected to post a structural deficit of about 0.5% relative to GDP in 2023.

The Ministry of Finance’s estimate of the long-term sustainability of public finances is produced in accordance with the methods and calculation principles jointly agreed in the EU. The sustainability calculation is a pressure projection in which the trends under current legislation and practices are projected to the future with the help of population projections, spending breakdowns by age groups, and estimates of long-term economic growth trends.

Significant uncertainty is associated within the sustainability gap estimate, and it is sensitive to the assumptions used about future development. For this reason, the sensitivity of the sustainability gap calculation to the most important economic calculation assumptions is examined in the table below. Despite the uncertainty, the calculation offers a coherent way of examining the challenges facing public finances and means to overcome them.



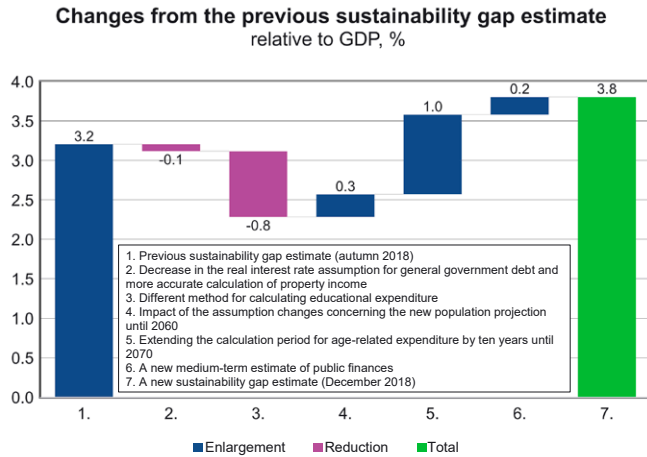


Table 21. General government finances 2017–2070

	2017	2023**	2030**	2040**	2050**	2060**	2070**	2070/2017**
	relative to GDP, %							change, %
Total expenditure	54.0	52.2	55.3	56.9	57.9	60.7	65.0	11.0
of which age-related and unemployment expenditure	29.7	30.0	31.6	32.1	32.0	33.1	35.2	5.4
Pensions	13.5	13.9	14.7	14.2	13.5	14.2	15.4	1.9
Old-age pensions	12.3	12.9	13.7	13.2	12.5	13.0	14.2	1.9
Other pensions	1.1	1.0	1.0	1.0	1.0	1.1	1.2	0.1
Health care	6.0	6.3	6.6	6.9	7.1	7.4	7.8	1.8
Long-term care	2.2	2.5	3.0	3.8	4.2	4.4	5.0	2.7
Education	5.8	5.5	5.4	5.1	5.0	4.9	4.8	-0.9
Unemployment	2.3	1.9	2.0	2.1	2.1	2.2	2.2	-0.1
Interest expenditure	1.0	0.9	2.5	3.5	4.7	6.3	8.5	7.5
Total revenue	53.3	51.8	52.9	53.1	53.6	54.4	55.1	1.7
of which: property income	2.6	3.1	4.3	4.4	5.0	5.8	6.4	3.8
Net lending ¹	-0.7	-0.4	-2.4	-3.8	-4.3	-6.2	-9.9	-9.2
of which: transfer to pension funds	0.9	0.9	1.0	1.8	3.1	3.4	2.9	2.0
General government debt	61.3	57.8	64.3	88.3	120.1	161.7	217.4	156.0
General government assets, consolidated	132.9	131.9	134.0	136.1	145.4	159.8	170.6	37.7
Pension funds` financial assets, consolidated	91.3	90.3	94.0	98.6	110.7	126.6	138.0	46.8

1) Cyclically-adjusted net lending as of 2030

Table 22. Impact of various factors on the sustainability gap

	Baseline scenario (December 2018)	Change, pp.	Impact on sustainability gap ¹ , pp.
Growth in general productivity (and real earnings)	on average 1.4%	+0.5	-0.5
Employment rate	will end up at 72.5% by 2070	+1.0	-0.4
Growth of productivity of public health and social services	0%	+0.5	-1.8
General government structural primary balance ² / GDP in 2023	+0.3%	+1.0	-1.0
Real rate of return on investments and real interest rate on general government debt		-0.5	+0.7
- of which interest on general government debt and return on central and local government investments in bonds	2%		
- of which return on central and local government investments in shares	4%		
- of which return on employment pension assets	3.5%		

1) The calculations are based on December 2018 MoF sustainability gap calculations (impact of assumption changes are stable over different calculation rounds)

2) Deficit excl. interest expenditure



MINISTRY OF FINANCE
Snellmaninkatu 1 A
PO BOX 28, 00023 Government
Tel. +358 295 160 01
www.financeministry.fi

ISSN 1797-9714 (pdf)
ISBN 978-952-251-978-8 (pdf)

December 2018