MINISTRY OF FINANCE

# Economic Survey

## Autumn 2016

Ministry of Finance publications – 31c/2016

Economic Prospects

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# Description page


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**Abstract**

The Finnish economy is predicted to post year-on-year growth of 1.1% in 2016. Over the next two years growth will hover around 1%, and cumulative growth for the whole outlook period will reach no more than some 3%.

Despite the slight rebound, the outlook for Finland's immediate future is one of continued economic weakness. The 2018 forecast is that GDP will still be some 3% lower than in 2008, and that industrial output will be around one-fifth lower than 10 years ago. The performance of exports will remain weaker than global trade, and therefore Finland will continue to lose market shares in world trade.

In the next few years ahead private consumption and investment will be the main drivers of economic activity. In the medium term potential output growth, which reflects the level of output possible given the resources on hand, will be less than 1%.

The growth outlook for the global economy and trade has deteriorated recently. World trade growth will reach just 2% this year, one percentage point slower than global trade growth.

The UK's exit from the EU is primarily a negative shock for the British economy itself. UK economic growth will slow appreciably in the immediate future.

In Finland, public finances will remain in deficit until the end of the decade. Successive governments have undertaken substantial fiscal adjustment efforts, but nonetheless failed to significantly reduce the deficit. Slow economic growth is not generating enough tax revenue to finance public expenditure.

# Preface

This Economic Survey offers projections of economic developments in 2016–2018. In addition to short-term prospects, it includes a medium-term economic outlook extending to 2020.

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 2015 published by Statistics Finland in July 2016 and on other public statistical sources available by 2 September 2016.

Helsinki September 2016

Ministry of Finance Economics Department

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

SYMBOLS AND CONVENTIONS USED

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

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

# Contents

# Summary

## Economic outlook 2015-2017

Statistics Finland's most recent figures indicate that after three years of recession, the Finnish economy posted GDP growth of 0.2% in 2015. The extremely modest growth was mainly driven by domestic demand.

The year-on-year growth forecast for 2016 is 1.1%. Over the next two years growth will hover around 1%, and cumulative growth for the whole outlook period will reach no more than some 3%.

Despite the slight rebound, the outlook for Finland's immediate future is one of continued economic weakness. The 2018 forecast is that GDP will still be some 3% lower than in 2008, and that industrial output will be around one-fifth lower than 10 years ago. The performance of exports will remain weaker than global trade, and therefore Finland will continue to lose market shares in world trade.

In the next few years ahead private consumption and investment will be the main drivers of economic activity. In the medium term potential output growth, which reflects the level of output possible given the resources on hand, will be less than 1%.

The growth outlook for the global economy and trade has deteriorated recently. World trade growth will reach just 2% this year, one percentage point slower than global trade growth. It is forecast that global trade will pick up slightly, but even by the end of the forecast horizon growth will reach no more than 4%. Growth prospects in China have continued to deteriorate, and the growth rate will slow to 6% in 2018. The slowdown of economic growth in China is reflected in the outlook of other emerging economies, above all because of the slower demand for raw materials. Recent developments in the Chinese stock market have prompted some uncertainty, but the stock market structure and operation differ significantly from those of its western counterparts and does not reflect developments in the real economy in the same way. There are no signs of a quick recovery in the Russian economy. Russian imports are continuing to fall, and there is still no evidence of the restructuring efforts that would be needed to achieve an economic rebound.

It is expected that many of Finland's major trade partners will see quite robust economic development. The Swedish economy will continue to grow at good clip: the growth forecast for the current year is over 3% and over the next two years growth will remain clearly faster than in the EU on average. The euro area has recovered to moderate economic growth, and cumulative growth over the outlook period will reach around 4%. US economic growth will slow slightly during 2016 and come in at 1.7%. However in 2017 and 2018 it is predicted

that growth will rebound to over 2% again. The UK's exit from the EU is primarily a negative shock for the British economy itself. UK economic growth will slow appreciably in the immediate future, and therefore Brexit will to some extent affect its trade partners' economic prospects. However it is still too early to offer confident estimates of the real economic effects of Brexit because negotiations on the terms of the UK exit will not start until later.

The monetary policies pursued by central banks are growth-supportive. The ECB has further expanded its exceptional monetary policy operations, and its reference rates will remain at historically low levels throughout the outlook period. Short-term interest rates will remain negative throughout the forecast horizon, and the average 10-year interest rate in 2018 will be just 1%.

It is projected that the euro to dollar exchange rate will remain more or less unchanged at its current 1.1 level throughout the forecast horizon. Some 80% of Finnish exports are invoiced in euros or dollars. Lower energy prices, and oil prices in particular, are good news for the growth prospects of energy-intensive economies such as Finland. The sharpest falls in energy and raw material prices have bottomed out, and the price of oil will return to very moderate growth. There are no signs of any upward pressure developing on the prices of raw materials used by industry.

The development of earnings has a direct bearing on competitiveness and also impacts domestic cost trends. Nominal earnings will rise by just over 1% in 2016, but next year the Competitiveness Pact will slow the index of wage and salary earnings to less than 1%, and employers' social security contributions will decrease by around 7%. Assuming that these projections are accurate, Finnish competitiveness will improve in comparison with Sweden and Germany, for instance.

The Finnish GDP growth forecast for 2016 is 1.1%. This moderate growth will mainly be driven by private consumption and increasing investment. Private consumption will increase by 1.2% from last year, primarily on the back of household real disposable income growth and the turn for the better in the labour market. There will be no major change in household indebtedness, and the savings rate will fall slightly. Private investment is predicted to show broad-based growth at 4.3%, with only R&D investment decreasing. Investment in residential housing construction will increase by 9% from last year and other building construction investment by just over 7%.

With imports growth outpacing exports growth, net exports will have a clearly negative effect on economic growth. Imports will increase by 2% this year on the back of increasing investment and consumer demand. It is predicted that exports will rise by no more than 1.0%, and therefore Finland will continue to lose market shares in world trade. It is predicted that the current account will show a slight surplus this year.

Industrial output is continuing to fall: the forecast predicts a year-on-year decrease of 2.2%. Service output growth will come in at less than 1%, so overall the picture of output in 2016 is very subdued. The employment rate is predicted to rise to 68.5%. The trend of the unemployment rate has begun to fall slightly, and the annual average unemployment rate is predicted to come in at 9%. The number of the long-term unemployed is still rising. Consumer prices are continuing to rise moderately at just 0.4%.

The GDP growth forecast for 2017 is 0.9%. This growth will again mainly be driven by investment and private consumption. Exports will pick up in the wake of rebounding world trade, but the growth rate will remain historically subdued. Exports will marginally outpace imports growth, so the growth contribution of net exports will be slightly positive. Private investment will continue to develop favourably, even though the period of fastest growth in construction investment has passed. On the other hand, investment in machinery and equipment and R&D investment will also return to growth.

Private consumption volume growth will slow somewhat to 0.7%, but still remain relatively strong compared with the development of disposable income. It is predicted that as a result of the Competitiveness Pact, nominal earnings will rise by no more than 0.8%. The improving employment situation will contribute to bolster private consumption. It is predicted that industrial output will at long last return to growth of around 2%, mainly on the back of strong metal industry performance. There is no significant recovery in sight for service production. The number of employed persons will increase by 0.3%, and the unemployment rate is expected to fall to 8.8%. Consumer prices will accelerate to 1.1%.

The GDP growth forecast for the last year of the forecast horizon is 1.1%. Overall, the growth outlook for the 2016–2018 period is extremely subdued. The reason for this lies in the sluggish performance of exports throughout the outlook period. In the short term domestic demand will continue to drive economic growth, but for a small open economy like Finland this is not enough to generate faster than projected growth. From the point of view of economic welfare and the underlying international division of labour, it is crucial that the country also has a competitive export sector.

Projected cumulative growth in 2016–2018 will reach no more than some 3%, and the GDP volume will still remain lower than in 2008. The Finnish economy is thus in poor shape and faces even greater challenges than foreseen earlier. During the forecast horizon the Finnish economy will grow slightly faster than potential output, and therefore the negative output gap will shrink.

Finnish public finances will remain in deficit over the outlook period, despite the fiscal adjustment efforts of successive governments. The deficit is gradually shrinking, though. The sluggish rate of economic growth is not generating enough tax revenue to finance public expenditure, which is furthermore increasing with population ageing. Within general government, the sector showing the biggest deficit is central government. The tax rate, i.e. the ratio of taxes to GDP, is set to fall in the next years ahead. The Competitiveness Pact will significantly reduce the tax rate. The expenditure rate will also fall over the outlook horizon.

The public debt to GDP ratio has risen without interruption for a long time, and the debt ratio will only begin to fall towards the end of the decade. In 2015 the general government debt ratio breached the 60% limit set out in the EU Treaty, and it will remain over the limit until the end of the decade.

The risks of the forecast for the international economy remain skewed to the downside. In China, indebtedness has continued to grow rapidly, especially in the private sector. The Chinese slowdown and restructuring may also cause greater than anticipated problems especially for emerging economies. In the euro area, too, the risks remain skewed to the

downside, and it is extremely difficult to forecast the economic fallout of Brexit. Russia's economic situation remains precarious. Political tensions are on the rise again and may further deepen the recession in Russia.

The sense of uncertainty is also expected to continue in the financial market. The situation in the Italian and to some extent in the German banking sector is causing concern, and there is an apparent risk of contagion. Bank stress testing will not be enough to completely dissipate the uncertainty surrounding the banking sector. It is impossible to offer an overall assessment of the consequences of an unconventional fiscal policy. In any event the current environment of light fiscal policy has created a stronger search-for-yield mentality, and investment flows have been channelled into the housing and stock market, partly as a result of the low demand for credit.

The domestic risks are related to the development of the real economy and the labour market. Finnish economic growth has been dismal in the past few years, and it will continue to remain slower than in competitor countries over the next couple of years. Given the kind of growth trajectory projected, the Finnish economy will be sensitive to negative shocks, and the growth rate will not be sufficient to bring a significant improvement to the labour market. The Government's employment target will not be reached under the conditions forecast, and the growth of long-term and structural unemployment will scar the economy for a long time to come. The projected economic scenario will not significantly improve the health of public finances in Finland.

Priority focus should now be given to developing economic policy reforms that have genuine impact on household and business behaviour. The proportion of the inactive population is too high, and the supply and demand match in the labour market needs improving. Decisions on business location and production activities are influenced by input price levels and their development. In a competitive marketplace these factors will have an increasingly pronounced influence, and this should be taken into account in economic policy making.

Given the subdued economic outlook, the development of the Finnish economy and the country's economic policies will be closely watched, both within and from outside its borders. The views and assessments of outside observers will also have an impact on how the future economic operating environment takes shape.

## Table 1. Key forecast figures

| | 2015 EUR bn | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|---|
| | | change in volume, % | | | | | |
| GDP at market prices | 209 | -0.8 | -0.7 | 0.2 | 1.1 | 0.9 | 1.1 |
| Imports | 78 | 0.5 | -0.2 | 1.9 | 2.0 | 2.9 | 3.6 |
| Total supply | 287 | -0.4 | -0.6 | 0.7 | 1.3 | 1.4 | 1.8 |
| | | | | | | | |
| Exports | 77 | 1.1 | -1.7 | -0.2 | 1.0 | 3.0 | 3.8 |
| Consumption | 167 | 0.0 | 0.3 | 1.1 | 0.8 | 0.1 | 0.4 |
| private | 116 | -0.5 | 0.6 | 1.5 | 1.2 | 0.7 | 0.6 |
| public | 51 | 1.1 | -0.5 | 0.4 | -0.1 | -1.3 | 0.0 |
| Investment | 43 | -4.9 | -2.5 | 0.7 | 4.3 | 3.3 | 2.9 |
| private | 35 | -6.6 | -3.4 | 2.2 | 4.3 | 3.9 | 3.8 |
| public | 8 | 2.6 | 0.9 | -5.1 | 4.3 | 0.6 | -0.8 |
| Total demand | 288 | -0.4 | -0.6 | 1.0 | 1.3 | 1.4 | 1.8 |
| domestic demand | 211 | -1.1 | -0.1 | 1.4 | 1.5 | 0.9 | 1.1 |
| | | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
| GDP, EUR bn | | 203 | 205 | 209 | 213 | 218 | 223 |
| Services, change in volume, % | | -1.4 | -0.5 | 0.8 | 0.8 | 0.8 | 0.9 |
| Industry, change in volume, % | | 0.0 | -0.5 | -2.5 | -2.2 | 1.9 | 2.6 |
| Labour productivity, change, % | | 0.5 | -0.1 | 0.2 | 0.0 | -0.3 | 1.0 |
| Employed labour force, change, % | | -1.0 | -0.4 | -0.4 | 0.4 | 0.3 | 0.5 |
| Employment rate, % | | 68.5 | 68.3 | 68.1 | 68.5 | 68.8 | 69.3 |
| Unemployment rate, % | | 8.2 | 8.7 | 9.4 | 9.0 | 8.8 | 8.5 |
| Consumer price index, change, % | | 1.5 | 1.0 | -0.2 | 0.4 | 1.1 | 1.3 |
| Index of wage and salary earnings, change, % | | 2.1 | 1.4 | 1.3 | 1.2 | 0.8 | 1.2 |
| Current account, EUR bn | | -3.3 | -1.9 | 0.3 | 0.6 | 0.7 | 0.7 |
| Current account, relative to GDP, % | | -1.6 | -0.9 | 0.1 | 0.3 | 0.3 | 0.3 |
| Short-term interest rates (3-month Euribor), % | | 0.2 | 0.2 | 0.0 | -0.3 | -0.3 | -0.1 |
| Long-term interest rates (10-year govt. bonds), % | | 1.9 | 1.4 | 0.7 | 0.3 | 0.4 | 1.0 |
| General government expenditure, relative to GDP, % | | 57.5 | 58.1 | 57.7 | 57.4 | 56.6 | 55.9 |
| Tax ratio, relative to GDP, % | | 43.7 | 43.9 | 44.1 | 44.3 | 43.3 | 42.9 |
| General government net lending, relative to GDP, % | | -2.6 | -3.2 | -2.8 | -2.4 | -2.6 | -2.0 |
| Central government net lending, relative to GDP, % | | -3.7 | -3.7 | -3.0 | -2.8 | -2.8 | -2.3 |
| General government gross debt, relative to GDP, % | | 55.4 | 59.3 | 62.6 | 64.3 | 65.8 | 66.4 |
| Central government debt, relative to GDP, % | | 44.1 | 46.3 | 47.7 | 49.7 | 51.2 | 52.1 |

## Macroeconomic model calculations of fiscal adjustment using fiscal policy rules

The following macroeconomic model calculations of fiscal adjustment using fiscal policy rules are based on the Kooma model developed by the MoF Economics Department. The 10-year projections are for the period from 2017 onwards. The results are reported in relation to the steady state path, which may be represented by the current MoF Economics Department's outlook for the economy.

The baseline scenario assesses the impacts of increased public expenditure when this increase is financed by public debt. Public consumption is increased by 1% of GDP at the start of the 10-year period, which immediately increases GDP. Public consumption displaces private consumption to some extent, and therefore an increase in public expenditure has the effect of reducing private consumption. An increase in public consumption contributes to increase total demand, and therefore producer prices begin to rise. Consequently the price competitiveness of exports will be reduced and exports will fall. With the slowdown of private domestic demand and exports growth, output growth also begins to fall. There is a temporary improvement in employment. Public sector debt increases because the increased level of consumption cannot be offset by changes to tax bases, but tax rates should also be increased.

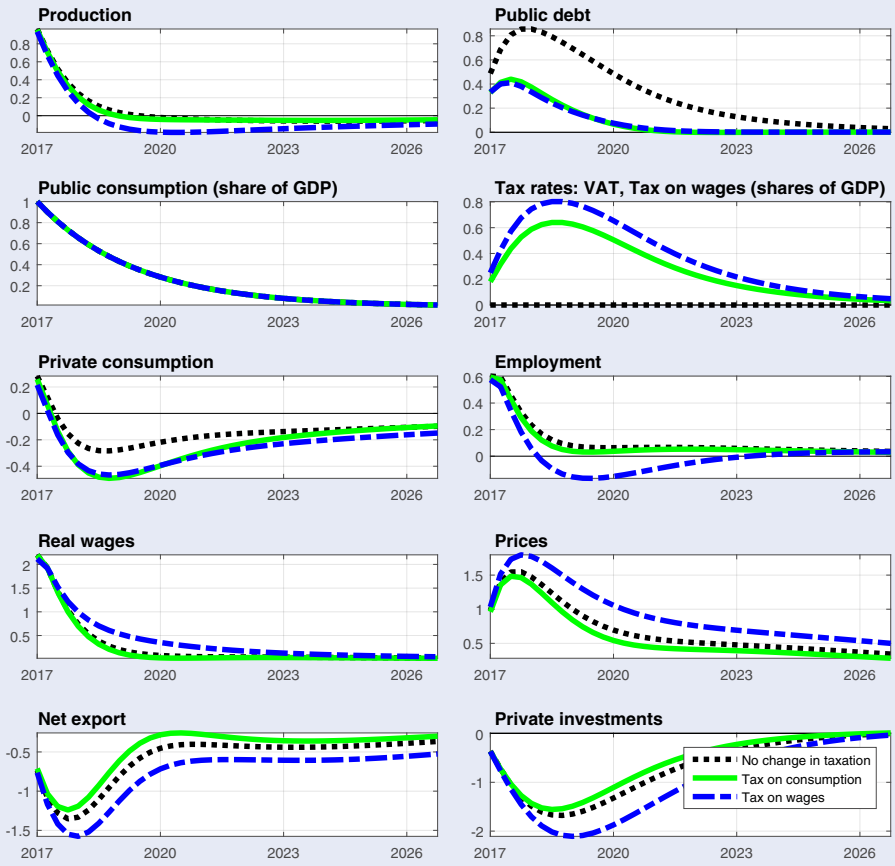
The calculation also provides a comparison of financing the increase in public consumption by increasing taxes on earned income and by increasing taxes on consumption. To this end we added to the model fiscal policy rules that aim to reduce fluctuations in debt levels and that return debt more rapidly back to its baseline. Both rules react in the same way to changes in debt and the level of debt and thus change either the tax rate on earned income or the consumption tax rate. The change of debt and level of debt impact the tax rate such that the weight given to the change of debt is about 63% and the weight of the of debt is about 37%.

When the fiscal policy rules are applied, public debt increases less than in the baseline scenario. When the change in debt caused by public consumption is adjusted using fiscal policy rules, consumption tax and earned income tax change relatively by almost the same amount. The Figures below show how different taxes can produce widely varying reactions in many key economic variables. The purpose of the fiscal policy rules is to stabilise public debt, but in the short term public debt will actually increase since according to the rules the change in taxes is incremental.

Fiscal adjustment via the taxation of consumption reduces private consumption more than in the baseline scenario. However GDP change is roughly of the same order as in the baseline scenario as both exports and investments decrease to a lesser extent and as producer prices rise more moderately. The taxation of consumption has no major effect on the labour market. The tax hike reduces the surplus that is extracted from labour and therefore reduces the supply of labour, and therefore employment remains slightly lower than in the baseline.

Fiscal adjustment via increased taxes on earned income leads to higher wage increases than in the previous calculations. As wages gradually rise, the demand for labour decreases and unemployment increases. Rising wages also drive up producer prices, and therefore exports and investments decline more sharply than in the previous calculations. The change in the consumption reaction compared with the baseline scenario is similar with both rules because rising wages offset the reduced level of employment when fiscal adjustment is based on earned income taxes. GDP is actually lower than in the baseline scenario.

## Adjusting public finances by using fiscal policy rules



## Medium-term outlook

Finland's GDP returned to slight growth last year, after three consecutive years of decline. Apart from cyclical factors, the poor performance of the economy is due to restructuring in industry and the economy as a whole, which has also undermined longer term growth prospects. It is expected that economic growth will hover around 1% in 2016–2018, and then be driven by the Competitiveness Pact to a rate of just over 1% in the medium term. This, however, is still a historically slow rate of growth.

The medium-term outlook can be examined on the basis of potential output, because this is thought to determine the economy's medium-term growth prospects. In its assessments of potential output the MoF Economics Department uses the production function method as developed jointly by the EU Commission and Member States, in which potential output growth is divided between projections of potential labour input, capital and total factor productivity. Potential output is an unobservable variable and its assessment is highly challenging, especially during a strong economic cycle and under conditions of rapid changes in the production structure.

The growth of labour input will increase potential output growth to some extent in the medium term. Labour input will decrease over the next years ahead as the population of working age continues to shrink. At the same time, though, labour participation rates are expected to increase somewhat, especially in older age groups. Another factor determining labour input growth is the structural unemployment rate: this is the level of unemployment below which upward wage pressure begins to develop in the labour market. In practice this means that unemployment is above its structural level when real unit labour costs are falling, i.e. when wages are rising more slowly than productivity and inflation taken together. Using the EU's common method, it is estimated that the Competitiveness Pact will contribute to lower Finland's structural unemployment rate to just over 7%. The medium-term forecast is that unemployment will begin to approximate this level as the output gap closes.

Increasing total factor productivity has been a major driver of economic growth in the past decades. In recent years, however, total factor productivity has shown only modest growth. This slowdown is attributable to both cyclical and structural factors. Output has dropped significantly in high-productivity branches, and at the same time services have gained increasing prominence in the economy. In recent years total factor productivity trend growth has been marginally negative, and it is expected that in the medium term growth will only just be positive, compared with growth rates of over 2% in the early 2000s.

The economy's potential output is dependent not only on labour input and total factor productivity, but also on the existing capital stock. Several years of low investment have contributed to slow capital stock growth and therefore undermined the economy's future growth potential. However an increased investment rate over the outlook period will increase the level of potential output through capital stock growth by just under half a per cent a year.

Overall it is projected that the economy's growth potential will rise to just over half a per cent a year.

The difference between total actual output and potential output, i.e. the output gap is negative, when actual output is lower than potential output. This means there is idle capac-

ity in the economy and output can grow more rapidly than potential output without creating price pressures. It is estimated that in 2016 the output gap will stand at around 2% of potential output. In 2016–2020, it is predicted that the economy will grow at an average annual rate of just over 1%. According to the EU's common production function method, Finland's potential output growth is slower, on average just over half a per cent a year. When GDP growth exceeds its potential, the output gap contracts, and according to the forecast the output gap will close in 2020. When the output gap closes, unemployment will approach its structural level, the labour participation rate will be at its trend level and total factor productivity growth will be equivalent to trend growth once all idle production capacity has been put to use.

Finnish public finances have been running a significant deficit since 2009. Although economic growth is rebounding and the output gap is contracting, this growth is not enough to bridge the deficit in public finances. At the same time, population ageing is continuing to weigh down on public finances. General government revenue is therefore no longer enough to sustain all the structures and functions of the public sector that were created on the foundations of stronger economic growth. Furthermore, it is expected that in the short term the Competitiveness Pact will undermine the budgetary position of general government. (For more details, see the box on the pages 21–22).

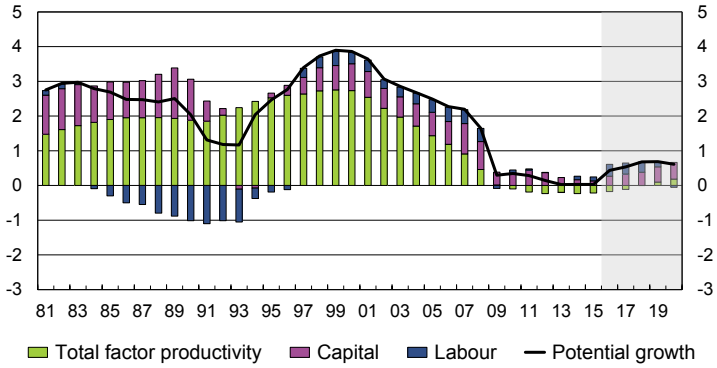
Potential output growth is too slow to stabilise public finances, as it is expected that economic growth and therefore tax revenue growth will remain subdued in the years ahead. Despite fiscal adjustment, public finances will remain in structural deficit. The public debt to GDP ratio exceeded the 60% limit in 2015, but it is anticipated that the growth of the debt to GDP ratio will come to a halt by the end of the decade.

**Table 2. Key forecast figures for the medium term**

| | 2014 | 2015 | 2016** | 2017** | 2018** | 2019** | 2020** |
|---|---|---|---|---|---|---|---|
| GDP at market prices, change in volume, % | -0.7 | 0.2 | 1.1 | 0.9 | 1.1 | 1.3 | 1.3 |
| Consumer price index, change, % | 1.0 | -0.2 | 0.4 | 1.1 | 1.3 | 1.6 | 1.8 |
| Unemployment rate, % | 8.7 | 9.4 | 9.0 | 8.8 | 8.5 | 8.1 | 7.7 |
| Employment rate, % | 68.3 | 68.1 | 68.5 | 68.8 | 69.3 | 69.7 | 70.1 |
| General government net lending, relative to GDP, % | -3.2 | -2.8 | -2.4 | -2.6 | -2.0 | -1.5 | -1.2 |
| Central government | -3.7 | -3.0 | -2.8 | -2.8 | -2.3 | -2.0 | -1.6 |
| Local government | -0.8 | -0.6 | -0.5 | -0.4 | -0.4 | -0.4 | -0.4 |
| Social security funds | 1.3 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.7 |
| Structural balance, relative to GDP, % | -1.6 | -1.2 | -1.2 | -1.6 | -1.3 | -1.1 | -1.2 |
| General government gross debt, relative to GDP, % | 59.3 | 62.6 | 64.3 | 65.8 | 66.4 | 66.2 | 65.6 |
| Central government debt, relative to GDP, % | 46.3 | 47.7 | 49.7 | 51.2 | 52.1 | 52.4 | 52.2 |
| Output gap, % of potential output [1] | -2.8 | -2.6 | -2.0 | -1.7 | -1.3 | -0.7 | 0.0 |

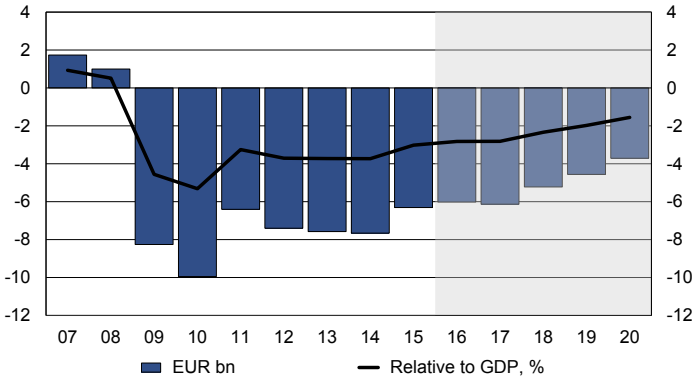
[1] Estimated according the method developed jointly by the EU Commission and Member States

**Contributions to potential growth**
according to EU method, %



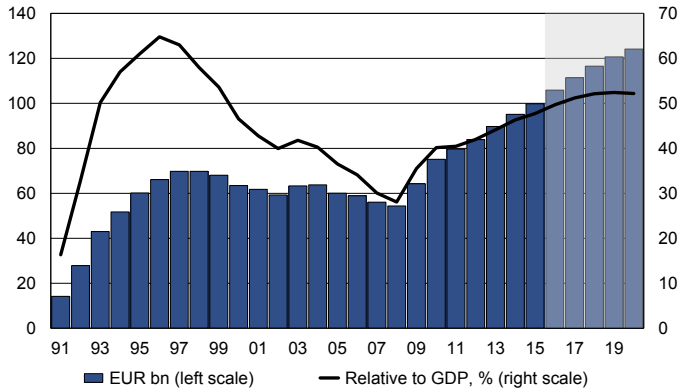

Sources: Statistics Finland, MoF

**Central government financial balance**




Sources: Statistics Finland, MoF

**Central government debt**




Sources: Statistics Finland, MoF

## How is the Competitiveness Pact taken into account in the forecast?

The Competitiveness Pact agreement reached by the labour market organisations was signed on 14 June 2016. The aim of the agreement is to improve the price competitiveness of Finnish business and industry and so to boost exports and employment.

Under the agreement, total annual working hours are increased by 24 hours, public sector holiday bonuses are cut, the employer's social security contributions are reduced, and part of the contribution burden is shifted to employees. Furthermore, existing collective agreements for both private sector and government employees are extended by one year without pay rises. The agreement will reduce unit labour costs in production by some 4%. Furthermore, the Government will introduce tax cuts to support the agreement.

### Impacts on employment

It is estimated that the package of measures under the Competitiveness Pact, including the effects of tax reductions, could contribute to increase employment by some 40,000 persons in the longer term. However, much uncertainty surrounds the employment effects of the Competitiveness Pact. Much will depend on how labour costs in Finland develop in comparison with competitor countries from 2017 onwards, and indeed on global economic developments more broadly. The subdued outlook of the global economy and especially the sluggish demand for investment goods are deterring the short-term positive effects. It is unlikely, therefore, that all the positive effects will take hold as quickly as the labour costs are going to fall.

The current forecast by the MoF Economics Department assumes that the reduction of labour costs will not yet bring an increase to employment in 2017. The favourable effects of the agreement on labour demand will begin to show up in 2018: employment growth will accelerate and continue in 2019–2020. The forecast predicts an overall increase in employment of 46,000 persons in 2017–2020. The Competitiveness Pact will also contribute to strengthen the favourable employment trends. Employment may, however, improve more strongly than predicted by virtue of the Competitiveness Pact.

### Impacts on public finances

The Competitiveness Pact includes elements that will both strengthen and weaken public finances. If the agreement increases employment to the extent expected and if central and local government employers manage to take full advantage of the savings potential created by the extension of working hours, then the long-term effect of the agreement on public finances may be neutral.

The Competitiveness Pact and associated tax cuts will weaken the budgetary position of general government by over one billion euros in 2017–2019 and by over EUR 800 million from 2020 onwards, not considering the positive effects of improved employment. An increase in the number of employed persons by 40,000 would strengthen the budgetary position of general government by some EUR 850 million in the longer term.

The Competitiveness Pact will have the effect of reducing general government revenue in the short term. It will reduce the overall social insurance contributions paid by employers and employees and ease direct taxation. Furthermore, the agreement will in the short term slow the growth of the wage bill and the amount of associated taxes and fees levied. The shift in the income distribution in favour of business and industry will increase the amount of taxes paid by companies on their profits.

On the other hand the agreement will also have the effect of reducing general government operating expenditure as the employer's ancillary costs tied to wages are reduced, public sector holiday bonuses are cut and as wages are frozen. In the longer term it will also reduce the need for labour in the public sector.

The following Table provides a summary assessment of the effects of the Competitiveness Pact on the general government's budgetary position.

**Net annual effect of Competitiveness Pact measures on public finances, EUR million**

| Measure | 2017 | 2018 | 2019 | 2020 | Longer term |
|---|---|---|---|---|---|
| Extension of annual working hours by 24 hours* | 50 | 100 | 120 | 140 | 140 |
| 30% cut to public sector holiday bonuses | 150 | 150 | 150 | 0 | 0 |
| Reduction of employers' sickness insurance contributions | -470 | -500 | -530 | -300 | -300 |
| Partial transfer of employment pension contribution and unemployment insurance contribution from employers to employees | 10 | 20 | 30 | 40 | 40 |
| Effect of internal transfer of employees' sickness insurance contributions via taxation | -400 | -320 | -290 | -150 | -150 |
| Active tax cuts in 2017 | -540 | -550 | -560 | -570 | -570 |
| **Total effect** | **-1200** | **-1100** | **-1080** | **-840** | **-840** |
| Effects via increased economic activity* | | | | | 850 |
| **Total effect in the longer term** | | | | | **10** |

* Impossible to reliably assess exact timing of effects

The extension of annual working hours by 24 hours will have no direct effects on general government finances. It will, however, reduce the need for labour and create the potential for net savings of some EUR 140 million in general government. The achievement of such savings requires that central and local government employers separately decide to take advantage of this opportunity. The central and local government forecasts assume that the imputed savings from longer working hours will gradually materialise by 2020, bearing in mind that the extension of working hours will bring no savings in the education sector.

The agreement will reduce the employer's social insurance contribution by around one percentage point in 2017–2019. The negative effect on general government finances will be in the order of EUR 500 million a year. From 2020 onwards the reduction in the contribution will be around 0.6 percentage points, and the negative effects on general government will be reduced to around EUR 300 million. In 2017–2019 part of this will be financed by temporary 30% cuts to public sector holiday bonuses.

The partial transfer of employment-related pension contributions and unemployment insurance contributions from employers to employees will ease corporate taxation and increase the taxation of wage earners by over EUR 300 million in 2017. By 2020, the effect will rise to EUR 1.1 billion. However, this will have no essential effect on the general government budgetary position.

The internal transfers of employees' sickness insurance contributions that are made for technical reasons will ease the taxation of wage earners on average by over EUR 300 million in 2017–2019, but the effect will be halved from the beginning of 2020. Furthermore, the Government will support the agreement by easing the taxation of wage earners and pensioners by a total of over EUR 500 million in 2017.

## Fiscal policy

The Government of Prime Minister Juha Sipilä has set itself the target of halting the growth of the public debt to GDP ratio by the end of the government term and putting an end to living on debt by 2021. To complement and concretise this debt objective, the Government has specified targets for the general government budgetary position that concern, on the one hand, the financial position of central government, local government and social security funds during the government term; and on the other hand, the medium-term structural balance of general government. If these targets are met, budget balance should more or less be restored in general government by the end of the government term.

Fiscal policy objectives are interim steps en route to public finance sustainability. Among the tools applied to achieve these objectives are immediate savings, promoting efficiency in public administration and service production, and steps to improve the conditions for economic growth.

As well as specifying fiscal policy objectives, the Government has set the target of increasing the employment rate to 72% and the number of employed persons by 110,000 during its term in office. The measures aimed at increasing employment and reducing unemployment will promote growth and strengthen public finances.

According to the forecast the incipient economic rebound is being driven by domestic demand. The outlook for exports does not appear to be strengthening. The Competitiveness Pact will certainly bolster exports, but will not alone be enough to get exports back to growth. Furthermore, the prospects for economic growth have been undermined by restructuring in industry, the growth of structural unemployment and the changing population age structure. It must be recognized that Finnish economic growth will not rebound to the level seen in the years and decades before the financial crisis.

As the economic downturn recedes, the general government budgetary position will gradually improve. The steps taken by the Government to stabilise public finances will also contribute to strengthen the budgetary position. Nonetheless public finances are faced with the risk of persistent structural imbalance. The foreseeable economic growth will not be enough to finance existing public structures nor to guarantee the long-term provision of statutory benefits and public services.

The broader picture of the economy is unchanged. For this reason there are no grounds to depart from the scale, content or implementation of the package of measures adopted by the Government to strengthen public finances.

The immediate savings measures outlined in the Government Programme are entered in the central government spending limits and included in the State Budget. These measures account for some EUR 4 billion of total targeted savings. The remaining EUR 6 billion depends upon restructuring measures designed to strengthen public finances and to increase employment.

Preparations for the social and health care reform are proceeding according to plan. Together with other measures designed to create efficiencies in public administration, the reforms have the potential to strengthen public finances by EUR 4 billion, but only in the longer term.

Moderate wage settlements, the Competitiveness Pacts and the associated cuts in taxation will bolster employment and economic growth. The Government is also committed to support growth through investments and guarantees. Public investment is at a high level and public sector guarantees have increased very rapidly in recent years. However, it seems that without further measures neither the goals set for the employment rate and the number of employed persons nor the improvements targeted for the general government budgetary position will be reached.

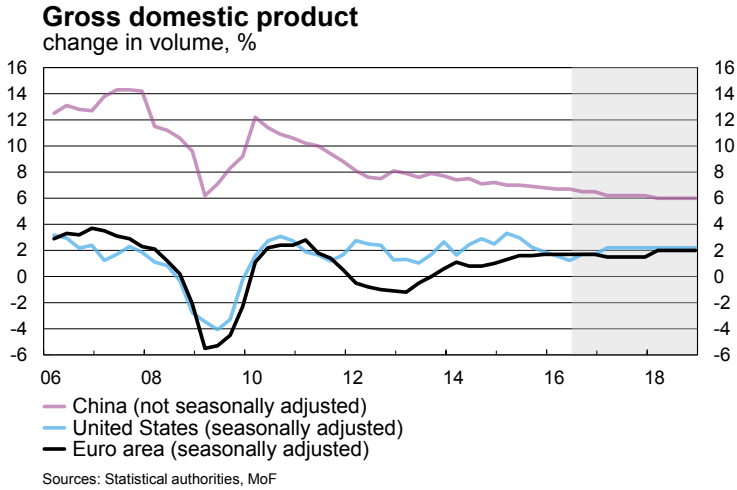
High employment and productivity are crucial to economic growth and the stability of public finances. The IMF, OECD and other international agencies underline the importance of economic restructuring to generating new economic growth. In its 2017 budget negotiations the Government reached agreement on a new set of measures to support employment and growth. Even with these reforms in place, there remain obstacles to employment and productivity growth that must be removed. This is the only way to effectively improve the future outlook and to create some room for movement in public finances in the short term as well.

# 1 Economic outlook

## 1.1 Global economy

### Global recovery remains sluggish

World purchasing power adjusted GDP growth will reach just 3.1% in 2016 and accelerate only slightly in 2017 and 2018. Growth is at its slowest rate since the financial crisis and below the long-term average. Many emerging economies have seen a clear slowdown in the pace of growth, and the rebound in industrial countries remains modest because of slow wage development and the consequent weak consumer demand and sluggish investment.




Sources: Statistical authorities, MoF

Sluggish growth in demand is reflected in slow world trade growth, low commodity prices and lower-than-targeted inflation in most major economies. Private investment is widely below the long-term trend in industrial countries, indicating that businesses expect demand growth to remain subdued. The weakness of demand is also reflected in falling export prices. Unemployment is falling only slowly in many advanced economies.

Productivity growth has been slow for a long time now. However OECD data indicate that productivity is increasing at the same rate as before in the most efficient companies, but slowed significantly in others. Productivity growth will have increasing significance in the future, especially in the ageing European labour market.

The outlook for the UK economy is overshadowed by the uncertainty caused by the Brexit vote. As a result companies are postponing their investments, and households are spending less. UK growth will slow considerably in 2016–2018, and the economy may even dip into recession. Long-term growth, too, will be slower than predicted earlier, which will further reduce investment.

The euro area has remained on a slow growth track, partly as a result of reduced import prices and a weaker euro exchange rate. These tailwinds will gradually dissipate. The supply of credit and overall financing conditions have improved, and fiscal and monetary policies are expansionary. These factors are contributing to drive private consumer demand in particular, and investment is also slowly rebounding.

The UK's pending exit from the EU is also causing uncertainty in the euro area, which may have slight adverse effects on investment and growth. In Spain, Ireland and elsewhere, earlier structural reforms have contributed to a return to relatively brisk growth. Euro area growth is still hampered by persistently high unemployment. In Sweden, growth is slowing but still robust, and employment remains strong.

Broad-based but relatively slow recovery is continuing in the United States. Growth is supported by stronger household balance sheets, favourable labour market trends and a lighter fiscal policy. Both nominal and real wages are continuing to rise quite robustly. Consumer confidence has returned, but expectations have declined somewhat. Investment is set to grow at a moderate rate.

The Russian economy remains dependent on oil and gas exports. The country has failed to transform itself or to use the revenue generated from raw materials to diversify its production structure and to generate increased value added. Its growth potential is effectively hampered by unmade investments and obsolete economic structures, such as public interference in private sector investment and production decisions. Growth in Russia will remain very muted even after the current recession.

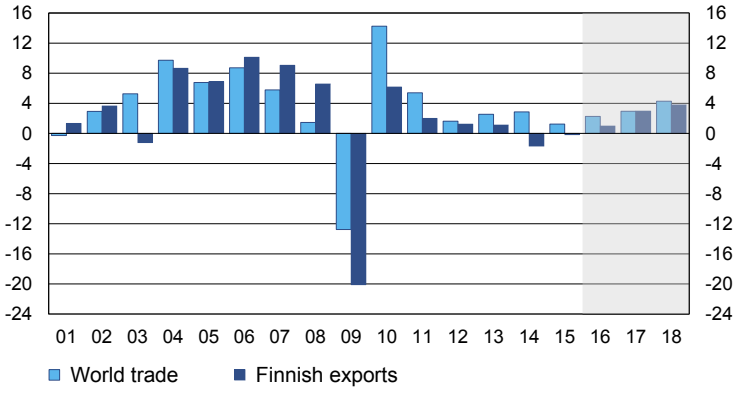
In China, growth in industry, construction and foreign trade has already slowed significantly, and these trends are set to continue. The Chinese economy is now in transition from an export and investment driven model to one led by domestic consumption and services. Historically, corresponding changes have resulted in a marked slowdown of growth. If the country is successful in its policy, the slowdown will be well controlled. On the other hand, China continues to adhere to old structures, which will slow the process of change.

### World trade growth extremely modest

Slow world trade growth reflects the slowdown of Chinese manufacturing growth and sluggish investment in industrial countries. Imports growth will remain modest, especially in emerging economies.

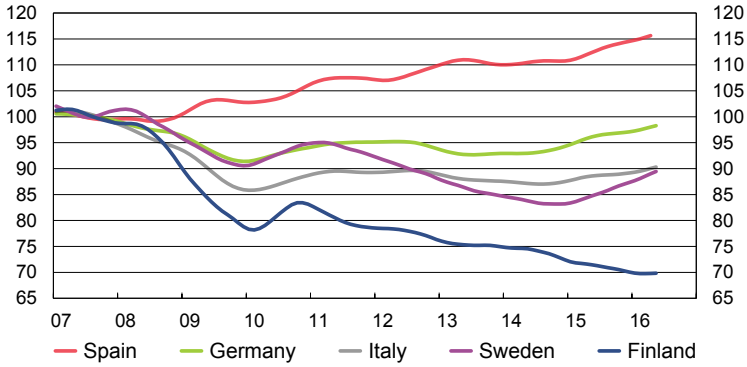
In the 1990s and early 2000s the growth rate for goods trade was more than twice as high as industrial output growth, but at the moment trade is actually growing more slowly than production. Earlier, such slow rates of trade growth have only been seen under conditions of recession. Industrial countries' import elasticity to GDP dipped even before

**World trade**
change in volume, %




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

**Market share in goods exports[1]**
2007=100, trend (HP)




[1] Ratio of goods exports growth to world trade growth

Sources: Macrobond, MoF

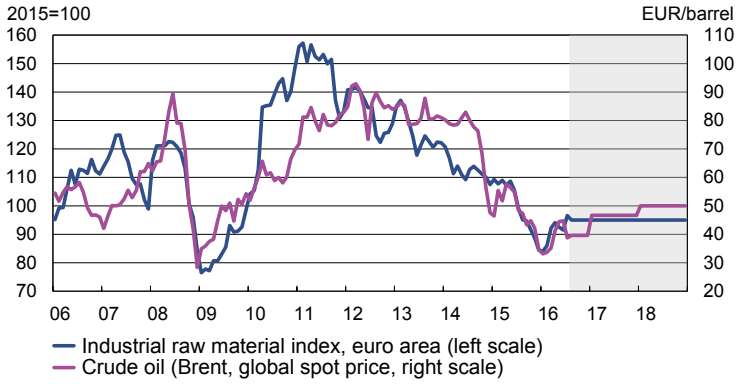
the financial crisis, but has since partly recovered. In emerging economies, by contrast, it seems that there has been a permanent decline in import intensity, which means that trade growth will remain modest.

Finland's market share in world trade has continued to shrink, but this trend is now slowing. Global trade will not provide a strong demand impetus for Finnish exports.

### Inflation set to remain weak

The price of crude oil has remained relatively low, above all in response to the deteriorating outlook in emerging economies and persistently high US and OPEC supply. As energy is an intermediate input in all products and services, the effects of the oil price shock are felt throughout the economy.

**Raw materials prices**
EUR




Sources: Hamburgisches WeltWirtschafts Institut, Macrobond, MoF

Slower than expected growth of demand and continued high supply have caused other industrial raw material prices to fall sharply, too. Raw material prices have apparently now reached a bottom. Furthermore, the slide in producer prices due to excess capacity in China has continued. Together, these factors have turned world export prices into decline.

Inflation expectations are extremely low and have continued to fall. Inflation targets will not be met, even with the unusual monetary policy stance of central banks. However there is no real threat of a deflationary cycle in sight.

### Interest rates to remain very low

Interest rates have remained low due to the scarcity of investment and search for safe investments, which has resulted in reduced risk premiums on long-term interest rates. In the United States, interest rates have begun slowly to move back to normal, but they will remain low throughout the outlook horizon. In the euro area, too, interest rates will long be at a clearly lower level than was seen during the pre-crisis period.

### Risks remain to the downside

In China, indebtedness has continued to grow rapidly, especially in the private sector. It is unclear how successful China will be in reforming its economic model without this leading to a significant slowdown in growth. However, its adherence to old structures may expose the economy to a sharper than anticipated slowdown.

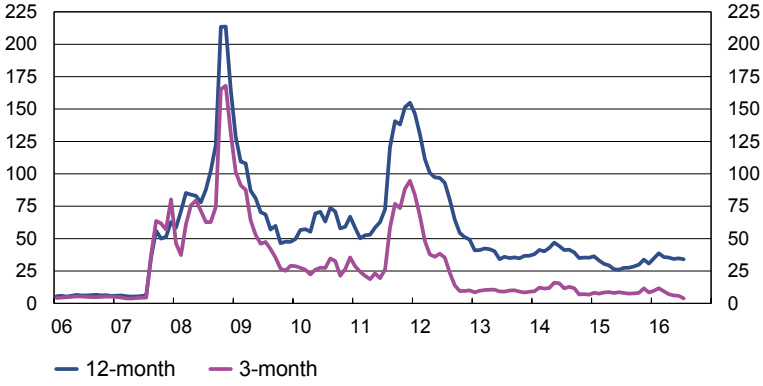
The outcome of the UK referendum on EU membership has already affected the markets, but the Brexit process may have greater negative repercussions than anticipated not only in the UK itself, but globally. In the euro area, too, the risks remain skewed to the downside. Economies may struggle even more than anticipated to recover with the waning of the current favourable conditions. The ability of the euro area to resist negative shocks will remain weak.

The economic situation in Russia remains fragile, and adjustment to the period of slow growth that lies ahead may cause political and economic difficulties.

Extremely low interest rates in industrial countries and a stronger search-for-yield mentality have steered investment flows into the housing and stock market, which may have led to overvaluations. In Sweden, for instance, housing prices have risen very sharply. The winding down of unconventional monetary policy, the edging up of interest rates and the strengthening of the US dollar may cause strong reactions in the financial market. Many emerging economies in particular may see increased movements of capital.

**Banking system risks**

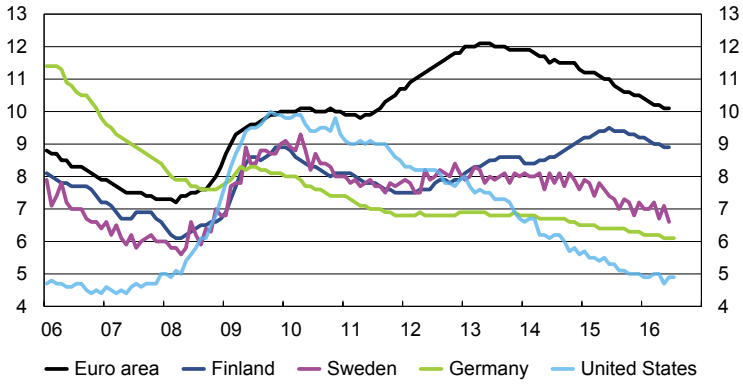
difference between secured Euribor and unsecured Eonia interest rate swap yield, basis points




Source: Macrobond

**Unemployment rate**

seasonally adjusted, %




Sources: Macrobond, statistical authorities

## Table 3. Gross domestic product

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | change in volume, % | | | | | |
| World (PPP) | 3.2 | 3.2 | 3.0 | 3.1 | 3.4 | 3.9 |
| Euro area | -0.5 | 1.0 | 1.8 | 1.7 | 1.5 | 2.0 |
| EU | 1.0 | 1.4 | 1.6 | 1.7 | 1.5 | 2.0 |
| Germany | 0.4 | 1.6 | 1.5 | 1.7 | 1.5 | 1.5 |
| France | 0.7 | 0.2 | 1.2 | 1.2 | 1.2 | 1.5 |
| Sweden | 1.6 | 2.0 | 3.9 | 3.2 | 2.7 | 2.5 |
| United Kingdom | 1.7 | 3.0 | 2.3 | 1.7 | 1.0 | 1.5 |
| United States | 1.5 | 2.4 | 2.4 | 1.7 | 2.2 | 2.2 |
| Japan | 1.6 | -0.1 | 0.6 | 0.5 | 0.5 | 0.7 |
| China | 7.8 | 7.3 | 6.9 | 6.5 | 6.2 | 6.0 |
| Russia | 1.2 | 0.6 | -3.7 | -2.0 | 0.0 | 1.0 |

Sources: Eurostat, statistical authorities, IMF, MoF

## Table 4. Background assumptions

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| World trade growth, % | 2.6 | 3.3 | 2.4 | 2.0 | 3.2 | 4.0 |
| EUR/USD | 1.33 | 1.33 | 1.11 | 1.11 | 1.05 | 1.02 |
| Industrial raw material price index, EA, € (2015=100) | 91.0 | 90.0 | 100.0 | 95.0 | 95.0 | 95.0 |
| Crude oil (Brent), €/barrel | 82.0 | 74.5 | 47.8 | 39.6 | 46.7 | 50.0 |
| 3-month Euribor, % | 0.2 | 0.2 | 0.0 | -0.3 | -0.3 | -0.1 |
| Government bonds (10-year), % | 1.9 | 1.4 | 0.7 | 0.3 | 0.4 | 1.0 |
| Export market share (2000=100) [1] | 84.5 | 80.8 | 79.4 | 78.6 | 78.5 | 78.3 |
| Import prices, % | -1.7 | -1.6 | -4.0 | -2.0 | 1.3 | 1.4 |

[1] Ratio of export growth to world trade growth

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

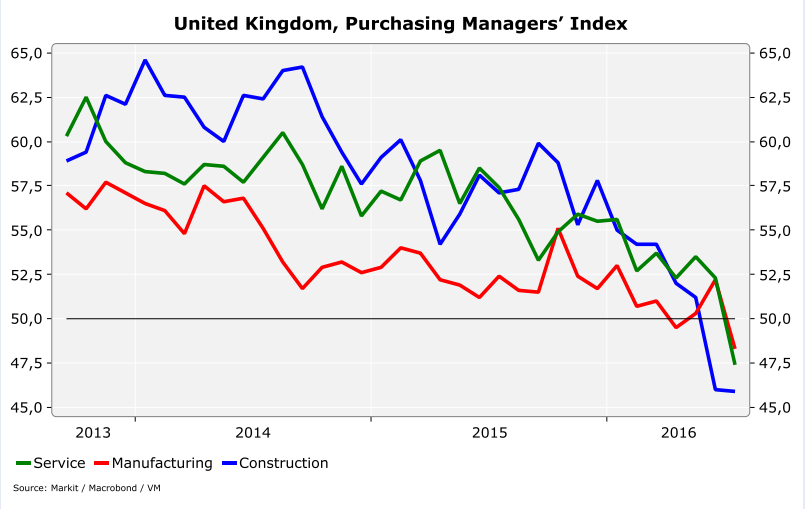
## Brexit

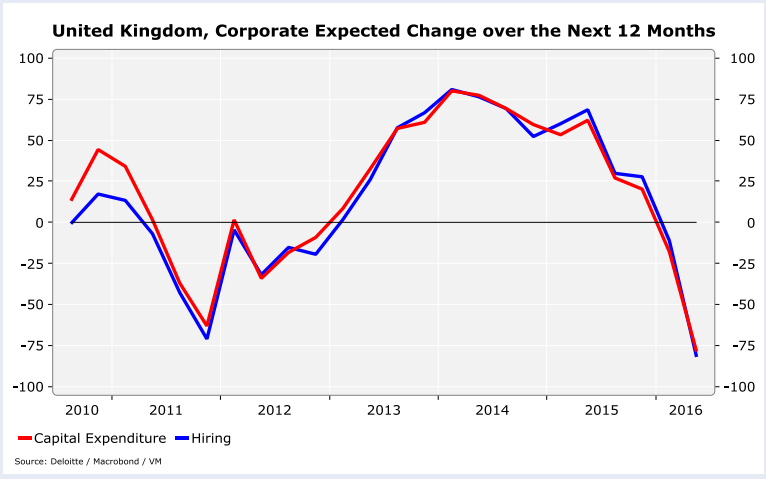
The UK referendum on EU membership saw the Brexit campaign prevail: 51.9% of the electorate voted to leave the EU, 48.1% voted to remain. Consequently, at the beginning of 2017, the UK is expected to notify the European Council of its intention to withdraw from the EU, as required under Article 50 of the Treaty on European Union. This will mark the beginning of a two-year negotiating period for the terms of withdrawal. Upon completion of this negotiation process EU treaties and laws will no longer be applied to the UK, unless otherwise agreed in these talks or unless the period is unanimously extended by all Member States.

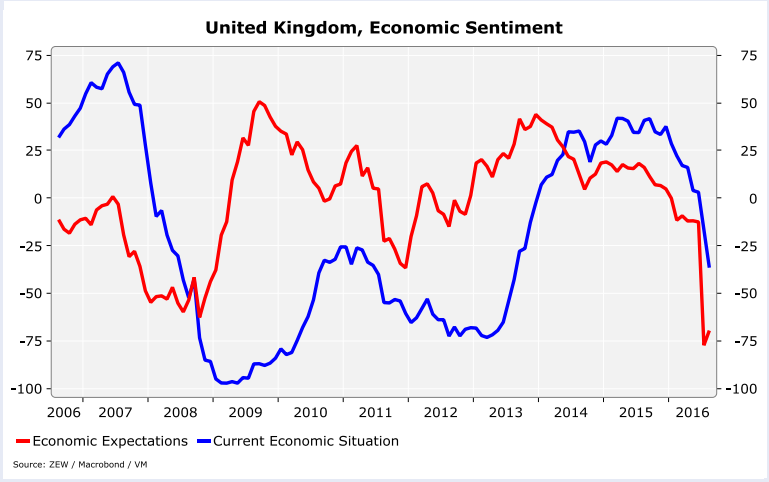
The most important economic issue in the withdrawal negotiations will concern the terms on which post-Brexit UK could have access to the EU single market. The withdrawal talks will be conducted under a negotiating framework unanimously adopted by the European Council. Member States cannot go it alone and independently negotiate trade agreements, for instance, with the UK. The withdrawal agreement is concluded between the EU and the departing country, and will require a qualified majority of the European Council and the consent of the European Parliament.

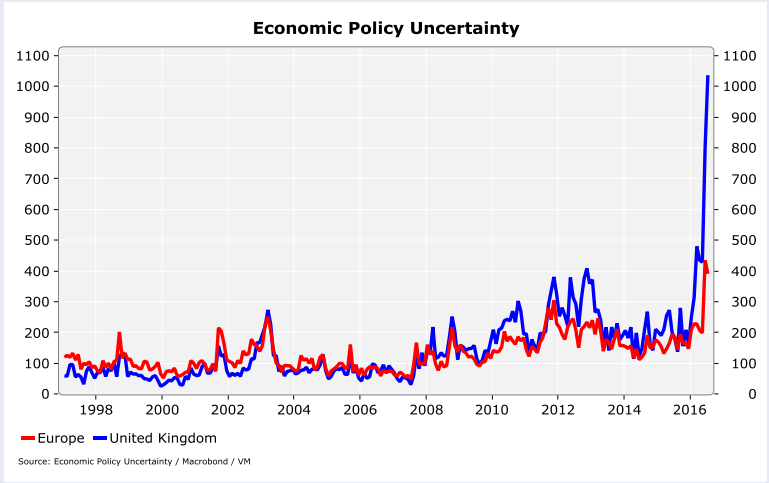
The UK's exit from the EU will have a number of economic consequences, some of which are already visible in exchange rates, purchasing managers indices and other confidence and uncertainty indicators (Figures 1–4). The sterling exchange rate fell by some 10% immediately after the Brexit vote, and it seems this was a permanent change. Already this is adversely affecting the standard of living in the UK. Long-term interest rates also fell, indicating expectations of reduced future economic activity. Longer-term ramifications will arise at least from changes in the EU membership fee, customs duties and other obstacles to trade, regulation, international movements of capital and immigration, as well as from adjustment costs and the confidence shock.

Most analysts conclude that Brexit will have a negative economic impact. Estimates of the long-term GDP effects range from 1.8% to 7.9% of GDP (Ebell and Warren, 2016). The magnitude of the effect will depend crucially on how the UK rebuilds its trade relations. There is considerable uncertainty about these estimates because it is as yet unclear just how the movement of products, services, people and capital will be restricted and because it is difficult to assess the scale of the dynamic effects.




United Kingdom, Corporate Expected Change over the Next 12 Months
100
75
50
25
0
-25
-50
-75
-100
2010
2011
2012
2013
2014
2015
2016
Capital Expenditure
Hiring
Source: Deloitte / Macrobond / VM


United Kingdom, Economic Sentiment
75
50
25
0
-25
-50
-75
-100
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Economic Expectations
Current Economic Situation
Source: ZEW / Macrobond / VM


Economic Policy Uncertainty
1100
1000
900
800
700
600
500
400
300
200
100
0
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Europe
United Kingdom
Source: Economic Policy Uncertainty / Macrobond / VM

The effects on other countries would also be predominantly negative, but with the exception of Ireland minor (Dhingra et al., 2016b).

UK growth will depend on what political choices are made in the future. Although Brexit will mainly affect the UK's GDP performance, it may also have an impact on growth if the changes lead to a slowdown of productivity through the slower diffusion of innovations, technologies and better management methods, for instance.

**How to study the effects of a future Brexit**

There are several different models that can be used to study the possible consequences of Brexit. The most important modelling methods are based on the estimation of a structural or reduced form of an econometric model. The structural method uses a multi-equation model to examine the UK economy, allowing for a detailed analysis of each modelled segment of the economy, yet in a macroeconomically consistent framework. This provides a reasonably reliable assessment of each individual channel of influence.

The reduced form method, then, uses a model that explains GDP and employment, for instance, by EU membership and numerous other factors. This complements the structural model in that it implicitly takes into account (almost) all effects of EU membership. The weakness of this approach is that the models shed no light on different channels of influence and are unable to analyse the magnitude of the effects caused by different factors. Many of the effects of leaving the EU may enhance or cancel out each other, or create so-called dynamic effects. In this case a structural model might over- or underestimate the total effect, and a reduced model might provide a more accurate measurement.

The third possible approach provides separate estimates of the effects of each individual factor associated with EU membership in partial balance. This approach does not guarantee the consistency of the macroeconomic estimate, as the analyses by definition exclude the interactions and other dependencies between sector or factors.

An integral part of the impact assessment process is counterfactual analysis. This involves describing the hypothetical state of the world in which the UK is not a member of the EU. The analyses compare actual situations and counterfactual scenarios, and the difference indicates the net effect of EU membership. The challenge in these analyses is of course to create a credible description of the UK's new position in the world.

Campos et al. (2014) apply the synthetic counterfactual method to examine the overall effect of EU membership in a reduced form model. This method estimates the effect of EU membership by comparing the development of a country's per capita GDP with the corresponding figure for a synthetically created country. This country is created so that the weighted average for all the countries in the comparative group follows as closely as possible the trajectory of the country concerned before EU membership. The study cited above reported that the long-term effect of EU integration has averaged 12% of GDP per capita. The counterfactual scenario can often be constructed in a more straightforward manner.

**Static effects**

One clear effect comes from the UK's EU membership fee: the country's net contribution to the EU budget is around GDP 8.5 billion a year. Post-Brexit, the membership fee would be lower or even zero, bringing the country annual savings of around 0.45% of GDP. If UK-EU relations follow the Norwegian model, the savings would be smaller.

Customs duties and tariffs, which do not exist in the EU internal market, represent another clear effect. The UK uses the customs duties negotiated by the EU in its trade with third countries. Post-Brexit UK will have to renegotiate its trade relations. The terms of trade will not necessarily be as favourable as they have been for the UK as an EU member. Nor will these negotiations hap-

pen very quickly. Even if the UK managed eventually to negotiate the same or even better terms of trade with third countries, the transitional period of weaker terms will inevitably be a long one.

The third type of clear effects come from so-called other barriers to trade, a residual category of other factors that hamper trade or add to the costs of trade. Additional costs arise, for instance, from customs clearances and anti-dumping regulations and generally from differences in regulations and national standards. Perhaps the most important role of the internal market is to remove these other barriers to trade and to create a bigger 'domestic market'. Therefore this is an area that will cause additional costs from a UK exit.

For the counterfactual scenario, it is necessary to make assumptions about the outcome of post-Brexit negotiations on trade arrangements, which will in part determine how big the scenario differences are. Dhinga et al. (2016a) found that customs duties in any case have only a minor impact, but other barriers to trade will reduce GDP by 1.3% if the counterfactual is membership of the European Economic Area (EEA). If the UK decides to revert to WTO rules, the impact will be 2.6%. Ottaviano et al. (2014) estimate that in an optimistic scenario, reduced trade will shrink UK GDP by 1.13% and in a pessimistic scenario by 3.09%. The corresponding estimates by Open Europe (2015a) are 0.1% and 2.2%. These costs exceed the benefits from lower membership fees.

**Dynamic effects**

International trade also has indirect dynamic effects. Lower imports mean that the range of products and services available in the country will be reduced, there will be less opportunities for specialisation, economies of scale will be smaller and the pressures of competition weaker, and ineffective businesses will be better placed to remain in the marketplace. A divergence of EU and UK economies would also lead to growing differences in regulatory frameworks, which over time would increase other barriers to trade. In the future the UK would also be less closely involved in deepening the European internal market. Sampson (2016) estimates that the dynamic effects will triple the above-mentioned static costs of reduced trade. According to Dhinga et al. (2016a), Britain's departure from the EU and EFTA membership would reduce GDP by a total of 6.3–9.5%.

An important but less evident aspect of the counterfactual is the volume of foreign direct investment (FDI). FDI improves productivity and growth, primarily because FDI investors are more efficient than average companies and bring along new technologies, new innovations and better management (Bloom et al., 2012). Haskel et al. (2007) found that the effects of FDI also spill over into domestically owned companies. The UK is the EU's largest FDI recipient, and part of this investment is apparently attributable to the country's EU membership. Part of post-Brexit FDI will be redirected elsewhere, and this will have at least a temporary negative effect on productivity and growth.

Pain and Young (2004) estimate that EU membership has increased FDI by 10%, and that its impact on productivity is greater than that of domestic investment. Open Europe (2015a) thinks the impact is much smaller. This is partly because their analysis does not consider access to the EU internal market as an FDI attractant. Bruno et al. (2016) estimate that on average, the impact of the UK's EU membership on direct investment is 22%.

**Other channels of influence**

Open Europe (2015b) estimates that the total cost to British companies of the 100 most expensive EU regulations comes to more than EUR 33 billion a year. In principle, the UK can ease the burden of regulation once it has left the EU. On the other hand, many indicators suggest that the UK already has one of the lightest regulatory burdens in the EU. Easing regulation is a political decision, and it is not clear that Brexit will be conducive to a political atmosphere where the regulation of business will be eased. Furthermore, access to the EU may in any case require that products and services comply with EU rules.

The impacts of the regulatory burden are fairly well understood at the microlevel, but the macroeconomic effects of regulation is a rather more complex issue. A macroeconomic estimate cannot be put together simply by summing up the effects of individual regulations, for this will only provide an estimate of the gross costs of regulation to business.

Post-Brexit UK can also impose tighter controls on immigration from EU countries. However, immigrants arriving from the EU are more likely to be employed taxpayers and to be better educated than the original British population, so it is clear that EU immigration is beneficial for the country. Most studies agree that net immigration is beneficial, especially as far as the arrival of highly educated immigrants is concerned (e.g. Ottaviano et al., 2016; Ortega and Peri, 2014). Felbermayr (2010) found that a 10% increase in the number of immigrants increased per capita GDP by 2.2%. Boubtane et al. (2015) estimate that a 50% reduction in net immigration would reduce UK productivity growth by 0.32%.

Access to the EU internal market creates a bigger 'domestic market', which offers greater economies of scale and scope, improves opportunities for specialisation and brings increased competitive pressure. These benefits will be lost if post-Brexit access to the internal market is hampered. The benefits are mainly generated through dynamic effects. Analysing and measuring them is a complex task, and therefore it is also difficult to provide a quantitative estimate. A recent example of such an analysis is provided by Ilzkovitz et al. (2007).

Significant effects may also be created through global value chains. UK companies are an integral part of European chains of supply. UK trade with the EU is more heavily tilted towards intermediates and cross-border value chains than its trade with the rest of the world. According to the OECD, 8% of UK value added in exports came from its EU trade, compared with 3% from trade with the USA, for instance (OECD, 2015). Value chains can, however, have major effects. Even if Brexit had only relatively minor effects on UK trade or the country's ability to generate value added, large amounts of production related to the global value chain may still be relocated to regions that now provide greater relative efficiencies. Traditional trade models may therefore underestimate the effects of Brexit.

**Short-term effects**

The factors mentioned above will have restructuring effects in the UK and cause transitional and disruption costs. Minford (2006) – virtually the only commentator who believes that Brexit would be economically beneficial to the UK – comes to the conclusion that manufacturing will effectively end in the UK. The transfer of capital, skills, labour and other assets from branches and operations most adversely affected by Brexit to branches where Brexit will have less or even favourable effects, will not be an easy and smooth process.

Brexit also involves major uncertainties. For instance, the terms of the Brexit agreement are still unknown, nor is it clear how it will affect business investment and household consumption decisions. In any case the uncertainty and reduced confidence will increase households' precautionary and savings motives and raise the threshold for investment. This will cause a dip in both consumption and investment, with a clear negative short-term effect. The weaker long-term outlook will also have the effect of deterring investment even in the short term.

**Summary**

Most analysts come to the conclusion that in the long term, Brexit will make the UK poorer than it would be as an EU member. There are significant uncertainties about the magnitude of the effects, but the direction is clear.

The effects of Brexit are mainly at the level of GDP. UK growth is dependent first and foremost on national characteristics and on political choices. But Brexit can affect growth as well if the changes result in a slowdown of productivity through a slower diffusion of innovations, technologies and better management methods, for instance.

Since the Brexit result, forecasting agencies have significantly lowered their short-term growth projections for the UK. The Ministry of Finance forecast for UK growth over the outlook period has been revised downwards by 2.5 percentage points from the June forecast.

**References**


Bloom, N., R. Sadun and J. Van Reenen (2012,), "Americans Do IT Better: US Multinationals and the Productivity Miracle", American Economic Review 102(1), 167-201.

Boubtane, E., J-C. Dumont and C. Rault (2015), "Immigration and Economic Growth in the OECD Countries 1986-2006", CESIFO Working Paper 5392.

Bruno, R., N. Campos, S. Estrin and M. Tian (2016), "Gravitating towards Europe: An Econometric Analysis of the FDI Effects of EU Membership", Centre for Economic Performance Technical Report.

Campos, N.F., F. Coricelli and L. Moretti (2014), "Economic Growth and Political Integration: Estimating the Benefits from Membership in the European Union Using the Synthetic Counterfactuals Method", IZA Discussion Paper 8162.

Dhingra, S., H. Huang, G. Ottaviano, J.P. Pessoa, T. Sampson and J. Van Reenen (2016a), "The Costs and Benefits of Leaving the EU: Trade Effects", Centre for Economic Performance Technical Report.

Dhingra, S., G. Ottaviano, T. Sampson and J. Van Reenen (2016b), "The Consequences of Brexit for UK Trade and Living Standards", Centre for Economic Performance Brexit Analysis 02.

Ebell, M. and J. Warren (2016), "The Long-Term Economic Impact of Leaving the EU", National Institute Economic Review 236: 121-38.

Felbermayr, G., S. Hiller and D. Sala (2010), "Does Immigration Boost per Capita Income?", Economic Letters 107(2): 177-79.

Haskel, J., S. Pereira and M. Slaughter (2007), "Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?", Review of Economics and Statistics 89(3): 482-96.

Ilzkovitz, F., A. Dierx, V. Kovacs, and N. Sousa (2007), "Steps Towards a Deeper Economic Integration: The Internal Market in the 21st Century", European Economy – Economic Papers No. 271, European Commission.

Minford, A. (2006), "Measuring the Economic Costs and Benefits of the EU", Open Economies Review 17, pp. 509–24.

OECD (2015), "Trade in Value Added (TiVA) – October 2015", https://stats.oecd.org/index.aspx?queryid=66237.

Open Europe (2015a), "What if..? The Consequences, Challenges & Opportunities Facing Britain outside the EU".

Open Europe (2015b), "Top 100 EU rules cost Britain £33.3bn".

Ortega F. and G. Peri (2014), "Migration, Trade and Income", Journal of International Economics 92: 231-51.

Ottaviano, G., J.P. Pessoa, T. Sampson, and J. Van Reenen (2014), "The Costs and Benefits of Leaving the EU", CFS Working Paper No. 472.

Ottaviano, G., G. Peri and G. Wright (2016), "Immigration, Trade and Productivity in Services", CEP Discussion Paper 1353.

Pain, N. and G. Young (2004), "The Macroeconomic Impact of UK Withdrawal from the EU", Economic Modelling, 21, pp. 387–408.

Sampson, T. (2016), "Dynamic Selection: An Idea Flows Theory of Entry, Trade and Growth", The Quarterly Journal of Economics, forthcoming.

## 1.2 Foreign trade

### Exports growth slow to start up

According to Statistics Finland's national accounts figures out in July 2016, exports fell by 0.2% in 2015. Exports of goods and services continued to decline in the first quarter of 2016, but the ship delivery completed in Q2 boosted up the exports growth figures. Slow exports growth reflects several factors, the most significant of which have to do with the structure of the export industry, Finland's poor cost competitiveness, and sluggish export demand. In 2016 it is projected that exports will return to moderate growth. This will be on the back of moderate economic growth in Finland's most important export markets as well as improving price competitiveness.

Exports are predicted to grow by 1.0% in 2016, which remains slower than the rate of growth in the export markets. This year's exports growth will be bolstered not only by the completion of a ship delivery, but also by exports of refined oil products recovering to their normal level after an exceptionally poor performance in 2015. Continued low oil prices will serve to maintain world demand.

Measured by the real trade-weighted exchange rate, Finland's competitiveness improved during 2015 and has remained at that level in early 2016. When measured by unit labour costs, Finland's competitiveness improved slightly last year over the euro area average. Over the outlook period Finnish unit labour cost competitiveness will continue to improve as the Competitiveness Pact drives down wage costs and bolsters labour productivity growth.

In 2017 exports growth will reach 3% and in 2018 pick up further to almost 4% on the back of growth in advanced economies. Finland will continue to see its export market shares decline over the forecast horizon. Improving cost competitiveness will drive exports growth towards the end of the outlook period. Economic growth in the euro area will be moderate, but the period of fastest growth has passed. However the slight rebound in investment will improve the prospects of Finnish export companies to hold on to their market shares.

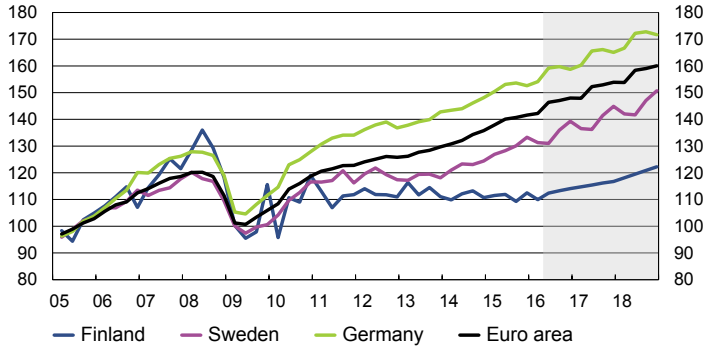
**Table 5. Foreign trade**

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | change in volume, % | | | | | |
| Exports of goods and services | 1.1 | -1.7 | -0.2 | 1.0 | 3.0 | 3.8 |
| Imports of goods and services | 0.5 | -0.2 | 1.9 | 2.0 | 2.9 | 3.6 |
| | change in price, % | | | | | |
| Exports of goods and services | -1.1 | -0.3 | -0.9 | -2.0 | 1.3 | 1.4 |
| Imports of goods and services | -1.7 | -1.6 | -4.0 | -2.0 | 1.3 | 1.4 |

It is as yet unclear how Finnish exports will be affected by the UK's vote to leave the EU. The bulk of Finnish exports to the UK consists of forest industry products. Finland also has some machinery and equipment exports to the UK, which will be more immediately affected by postponed investments in a climate of declining confidence. The forecast assumes that the Brexit vote will have only a marginal impact on Finnish exports, and therefore there is a significant risk of weaker than anticipated export growth as the loss of confidence may well spread across the rest of Europe.

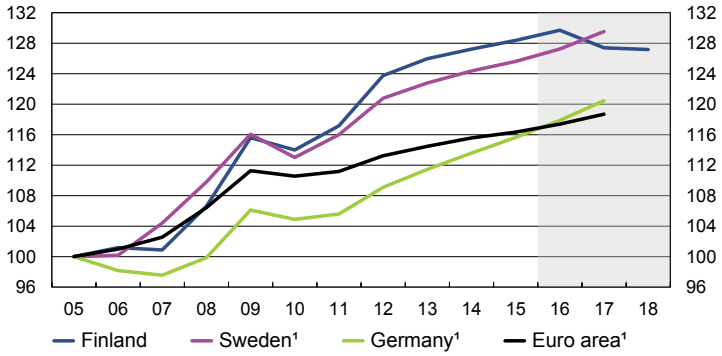
According to the July national accounts, the volume of imports increased by 1.9% in 2015. Imports have been subdued in the early part of the year. Q1 imports fell by more than 4% quarter-on-quarter. In 2016, however, domestic demand will drive imports to growth of 2%. Accelerating export growth will increase the use of imported inputs in 2017 and 2018, which will drive imports growth to over 3% in 2018. The contribution of net exports to GDP growth will remain negative in 2016, but turn positive as exports growth gathers momentum during the outlook period.

**Exports of goods and services**
volume 2005=100, seasonally adjusted




Sources: Eurostat, MoF

**Unit labour costs**
2005=100, nominal

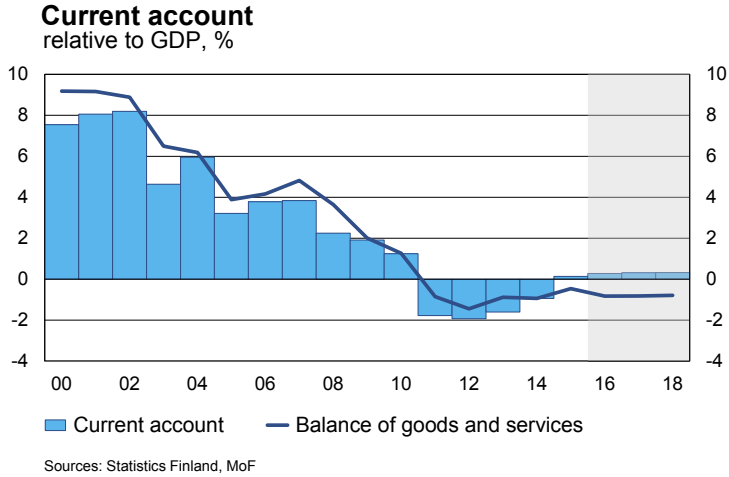



¹ European Commission forecast
Sources: European Commission, Statistics Finland, MoF

## Current account to remain in balance

Finland's 2015 current account surplus stood at EUR 0.3 billion. The deficit decreased rapidly in the first half of 2015, and by year-end the current account was marginally in surplus. In 2016 the trade balance surplus will shrink sharply, but the balance will improve towards the end of the outlook period with rebounding exports. Factor incomes will contribute to improve the current account this year. In the first half of 2016 receipts of primary income from abroad have been unchanged from last year, but primary income payments to other countries have fallen substantially, indicating lower payments of corporate profits or possible changes in timing. Nevertheless it is predicted that the current account surplus will increase to EUR 0.7 billion in 2018, or 0.3% of GDP.

The terms of trade have improved mainly as a result of the sharp fall in oil prices, but this effect has now faded. Export and import prices have continued to fall early in the year, reflecting the sluggish progress in world trade. In 2017 and 2018 it is predicted that foreign trade prices will begin to edge up. However import prices will rise only slowly as muted world trade growth means that the development of export prices from rival countries will remain moderate and as oil prices will only increase very moderately over the outlook period.




Sources: Statistics Finland, MoF

**Table 6. Current account**

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | EUR bn | | | | | |
| Balance of goods and services | -1.8 | -1.9 | -1.0 | -1.8 | -1.8 | -1.7 |
| Factor incomes and income transfers, net | -1.5 | 0.0 | 1.3 | 2.4 | 2.5 | 2.5 |
| Current account | -3.3 | -1.9 | 0.3 | 0.6 | 0.7 | 0.7 |
| Current account, relative to GDP, % | -1.6 | -0.9 | 0.1 | 0.3 | 0.3 | 0.3 |

# 1.3 Domestic demand

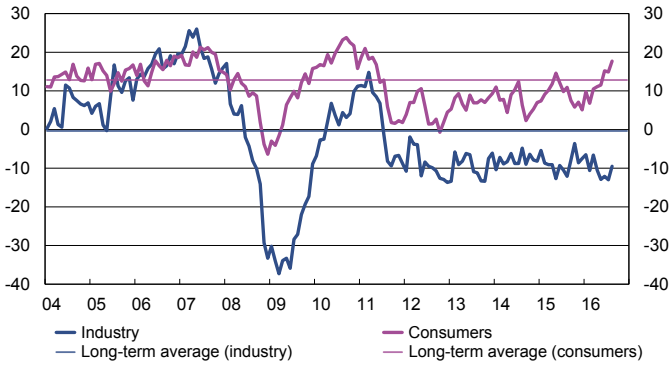
## 1.3.1 Private consumption

### Private consumption growth set to slow

Household real disposable income is set to increase by just over one per cent this year. As in 2015, purchasing power is bolstered by lower-than-usual inflation, which is due to falling oil prices. Consumer prices will rise by just 0.4 % in 2016. Private consumption growth is also supported by a slight improvement in employment and falling unemployment. According to the latest Consumer Survey, the public perception is that the risk of unemployment has decreased in the first half of the year.

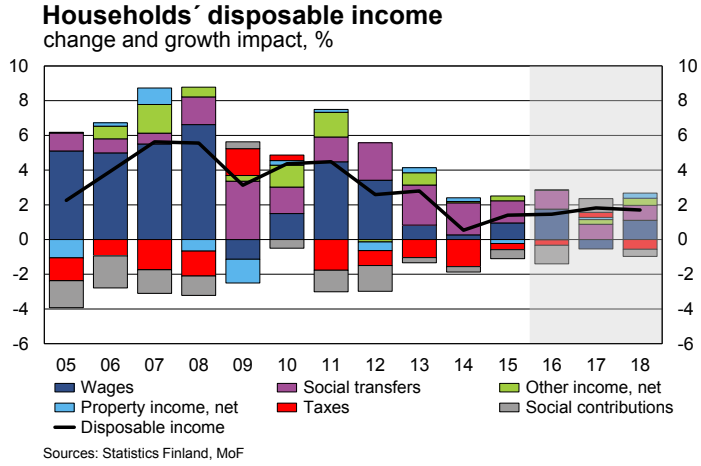
In recent months, however, confidence in one's own financial situation has shown some signs of deterioration. Even so the Consumer Survey indicates that consumers still feel this is a better-than-average time to make purchases of durables. Indeed, private consumption growth has been strongest precisely for durables. It is estimated that demand for durables will increase by almost 4 % this year. This is explained by rebounding car sales, which began to pick up in late 2015. The average age of cars on the road in Finland has been rising in recent years as the number of new car registrations has remained well below the long-term average. Lowered car taxes from the beginning of 2016 has also contributed to bolster demand for cars. In January-July the number of new car registrations was up substantially by 14.5 %. It is projected that during the remainder of the year the number of new car purchases will be lower than in 2015, partly because it is known that car taxes will again be cut from the beginning of 2017. Private consumption growth will slow towards the end of 2016 and come in at 1.2 %

**Industry and consumer confidence**
balance, seasonally adjusted




Source: European Commission

In 2017 private consumption growth will slow to 0.7 %. One contributing factor is that household real income will increase by no more than around 0.5 %. Accelerating inflation, cuts to social transfers and moderate wage increases will slow the growth of disposable household income. The wage bill is projected to grow by no more than 0.8 % next year, despite improving employment. Despite the freezing of the national pension index in 2016 – 2018, the current transfers received by households will increase nominally by an annual average of 2.3 % over the outlook period. One contributing factor is the ongoing process of demographic change, including the increasing number of pensioners. Under the Competitiveness Pact, part of the employer's burden from social security contributions will be shifted to employees. This will be offset by easing taxes on earned incomes in 2017. As a result of these tax cuts the average wage earner tax rate will fall slightly in 2017, but rise again in 2018. Private consumption growth will remain subdued in 2018. Despite a slight acceleration in employment growth, household purchasing power will hardly improve at all because of rising inflation and a higher tax rate. Private consumption growth will reach 0.6 % in 2018.



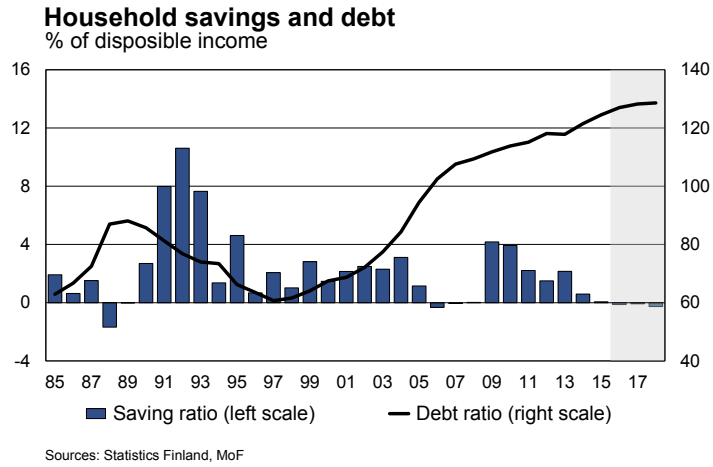
### Household debt growth to continue apace

In recent years private consumption has increased more rapidly than disposable income, and consequently the household savings rate has fallen almost without interruption since 2010. In part, this also reflects the growth of household indebtedness. Low interest rates and ready access to loans have increased borrowing. The growth of the debt ratio has not even been halted by rising unemployment. The 6–12 month loan repayment holidays marketed last year by banks to housing loan holders have further fuelled the growth of indebtedness. Based on the evidence from the first part of the year it seems that households are showing a continued interest in these repayment holidays. The debt burden of households is further increased by the growing stock of residential housing company loans. The need for renovations has increased in the ageing housing stock, and these renovations are being financed by housing company loans. Around 45 % of the current housing stock dates from the 1960s and 1970s, so the need for renovation will continue to increase indebtedness in the years ahead.

In a bid to curb the growth of indebtedness, new legislation was put in place in July 2016 to cap all new housing loans at 90 % LTV. For first-time buyers, the maximum LTV is 95 %. In addition, the tax credit on housing loan interest has been progressively reduced in recent years. In the current environment of low interest rates this has had only limited effect, however.

There are both upside and downside risks to the forecast for private consumption. Private consumption may develop more favourably than forecast if household debt continues to grow in the same way as in recent years. In macroeconomic terms the current level of household debt is not yet a problem, but the trend certainly gives cause for concern and if persistent, it would jeopardise macrostability. The Finnish ratio of household debt to disposable income is slightly higher than in the EU on average. Coupled with the tendency to take loan repayment holidays, the persistently low interest rates may well leave households with a false impression of the risks involved in an increasing debt burden. Low interest rates and ready access to loans, together with strong household sentiment, may therefore increase household indebtedness more than expected. This would be reflected not only in the housing market, but also in private consumption.

The downside risks associated with private consumption may materialise if employment trends are weaker than expected. The effects on consumption would be reflected both through income formation and consumer expectations, which might lead to a higher savings rate in the wake of increasing consumer caution.




Sources: Statistics Finland, MoF

### 1.3.2 Public consumption

Consisting of central government, local government and social security funds consumption expenditure, public consumption accounts for just short of one-quarter of GDP. Over the past 10 years the volume of public consumption has increased on average by 0.7% a year. The price of public consumption has risen on average by 3% a year, around one percentage point more than the price of private consumption. The volume of public consumption has been more or less unchanged for the past couple of years, and it is thought that over the forecast horizon it may even shrink somewhat as a result of fiscal adjustment.

The financing of asylum seeker reception centres will increase central government spending this year, even though the number of applicants is down from last year. Cuts to operating expenditure announced by the previous and current government will contribute to reduce consumption. Reduced social security contributions and cuts to holiday bonuses as set out under the Competitiveness Pact will reduce labour costs and therefore central government spending from the beginning of next year. Furthermore it is assumed that longer working hours will reduce central government spending on employee compensations.

Local government consumption expenditure will increase at an exceptionally slow rate in the years ahead; in fact in 2017 it is expected that expenditure will decrease. Consumption expenditure growth will be slowed among other things by the Competitiveness Pact agreement to reduce employer contributions and to cut holiday bonuses in 2017–2019 as well as by moderate wage settlements, structural adjustment measures adopted in the Government Programme, and adjustment programmes planned by municipalities and joint municipal authorities for the current year. The pension reform that takes effect from the beginning of 2017 will also reduce municipal employers' pension payments. However consumption expenditure will pick up again by the end of the decade with the expiry of the temporary cuts to holiday bonuses. In addition the changing population age structure and increased levels of immigration will increase need for local government services.

Expenditure by social security funds consists mainly of social benefits in kind paid out by the Social Insurance Institution Kela (reimbursements for medicines and travel and rehabilitation allowances) as well as wages. Savings measures announced by the Government will reduce expenditure on social benefits in kind in 2016–2017.

## Table 7. Consumption

| | 2015 share, % | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|---|
| | | Change in volume, % | | | | | |
| Private consumption | 100.0 | -0.5 | 0.6 | 1.5 | 1.2 | 0.7 | 0.6 |
| Households | 95.2 | -0.6 | 0.4 | 1.5 | 1.3 | 0.7 | 0.6 |
| Durables | 8.0 | -0.8 | 1.7 | 3.2 | 3.8 | 1.7 | 1.3 |
| Semi-durables | 8.0 | 0.3 | 0.4 | 0.0 | 0.2 | 0.5 | 0.6 |
| Non-durable goods | 26.5 | -0.5 | -0.5 | -0.1 | 1.1 | 0.2 | 0.0 |
| Services | 52.0 | -0.8 | 0.2 | 1.2 | 1.1 | 0.8 | 0.8 |
| Consumption by non-profit institutions | 4.8 | -1.6 | 4.0 | 0.0 | 0.0 | 0.5 | 0.5 |
| Public consumption | 100.0 | 1.1 | -0.5 | 0.4 | -0.1 | -1.3 | 0.0 |
| Central government | 26.8 | 4.3 | -1.5 | -0.9 | 1.4 | -1.4 | -1.0 |
| Local government | 66.0 | 0.0 | 0.0 | 0.5 | -0.1 | -1.0 | 0.3 |
| Social security funds | 7.2 | 0.0 | -1.0 | 3.8 | -4.7 | -3.4 | 0.8 |
| **TOTAL** | | **0.0** | **0.3** | **1.1** | **0.8** | **0.1** | **0.4** |
| Individual consumption expenditure in general government | | 0.1 | -0.5 | 0.8 | -0.6 | -1.5 | 0.3 |
| Total individual consumption expenditure | | -0.4 | 0.3 | 1.3 | -0.4 | 0.2 | 0.6 |
| Households´ disposable income | | 2.8 | 0.5 | 1.4 | 1.5 | 1.8 | 1.7 |
| Private consumption deflator | | 2.5 | 1.5 | 0.4 | 0.4 | 1.1 | 1.3 |
| Households´ real disposable income | | 0.3 | -0.9 | 1.0 | 1.1 | 0.7 | 0.4 |
| | | % | | | | | |
| Consumption as proportion of GDP (at current prices) | | 79.5 | 80.0 | 79.7 | 79.4 | 78.5 | 77.8 |
| Household savings ratio | | 2.2 | 0.6 | 0.1 | -0.1 | -0.1 | -0.3 |
| Household debt ratio [1)] | | 117.8 | 121.5 | 124.5 | 127.0 | 128.2 | 128.6 |

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

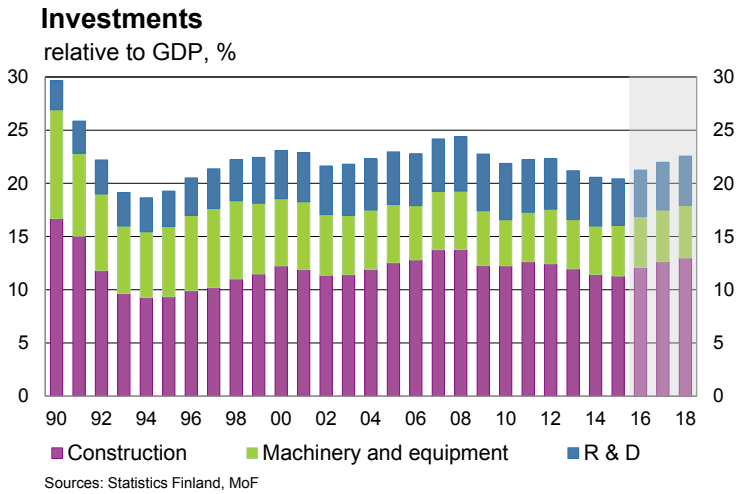
### 1.3.3 Private investment

#### Private investment driving the economy

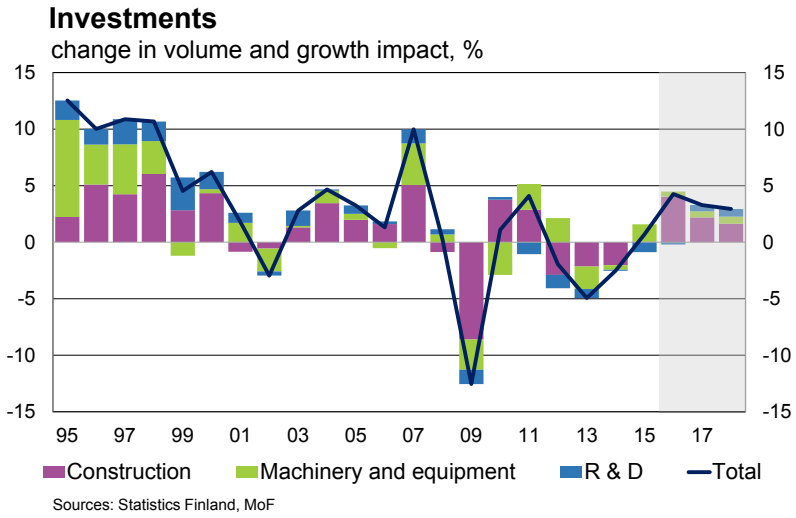
Private investment is set to increase year-on-year throughout the outlook horizon. The growth rate will be strongest for the current year. The deteriorating outlook for the global economy will have only a minor impact on investment, which will primarily be driven by construction. Robust growth will be recorded for both investment in residential and other building construction. Building renovation is also at a high level. Furthermore, a significant increase will be seen in machinery and equipment investments. R&D, on the other hand, will be adversely affected in the short term both by cutbacks in public funding and by redundancies of private sector research staff. The negative real interest rate is bolstering investment, whereas low total demand growth is not yet in itself have an accelerating effect. The ratio of private investment to GDP is set to increase, but not yet reach the pre-crisis level. The ratio of gross investment to GDP will also increase over the forecast period.

There are upside risks to the 2018 investment forecast in that the forest industry, for instance, has major projects in the pipeline. In addition, civil engineering works for the Pyhäjoki nuclear power plant have now started up, and plans are in place to build a range of auxiliary structures in 2017 and 2018. Moreover, in relation to the 2017 bugdet negotiations the Government decided on various additional measures affecting the state subsidiced housing production.

The most recent national accounts figures show that private investment was up 2.2% in 2015, although provisional data in March still indicated a one per cent fall. The private investment forecast for the current year projects a growth rate of over 4%, which will then slowly fall back over the coming years. In 2015 investment in machinery and equipment recorded particularly robust growth at 7%. R&D, on the other hand, remained on a sharp downward trend.




Sources: Statistics Finland, MoF




### Construction investment driving employment to growth

The construction investment forecast for the current year predicts robust growth of over 8%. The increase in new housing construction has already brought a sharp rise in the number of hours worked in the construction sector. It is expected that growth will remain robust in 2017 as the cubic metre volume of planning permissions in January-May was up 20% from the corresponding period last year.

Housing investment will be driven above all by low interest rates and the shortage of housing in growth centres, which is reflected in high yields from rents as well as sales prices. Housing production is mainly concentrated in and around the biggest cities and university towns, and mainly consists of the building of blocks of flats. The number of new housing starts in the first part of the year is clearly higher than last year, but the trend will slow towards the end of the year because in 2015 the number of starts began to rise sharply after the summer and the reference level will therefore be higher. It is estimated that the volume of new housing production will increase by some 15% this year.

Housing renovation is expected to continue to grow at an annual rate of around 2% over the forecast horizon, which is due to the need to update the ageing housing stock. Renovation investment by residential housing companies in particular has continued to rise, causing their stock of debt to rise in the first part of the year. Monthly changes compared with the corresponding periods of the previous year have been over 10%. Total housing investment, including both new housing construction and renovation, will continue to increase in 2017 and 2018.

Construction investment growth is broad-based. In other building construction, too, the first half of the year has seen robust growth in almost all categories. The cubic metre volume of planning permissions for business and office premises has risen sharply. Investment in public service buildings is at its highest level in 10 years. Other building construction projects take longer to complete than housing construction, and therefore some 2017 and even 2018 investments have already proceeded to implementation. In 2018 it is expected that the accelerating global economy will further increase construction investment.

### Civil engineering investment bolstered by public projects and regional construction

Civil engineering turnover and sales have grown solidly early in the year. Order books in the sector are strong above average, although the capacity utilisation rate in the spring was a disappointing 74%. Civil engineering companies take the view that demand remains the biggest obstacle to growth.

The price of crude oil began to fall again in the summer, and the reduced price pressures are certainly good news for civil engineering investment as oil represents a significant cost factor. The forecast for next year predicts accelerating growth, among other reasons because of the repair debt programme launched by the Government. Civil engineering investment is expected to slow and show hardly any growth in 2018.

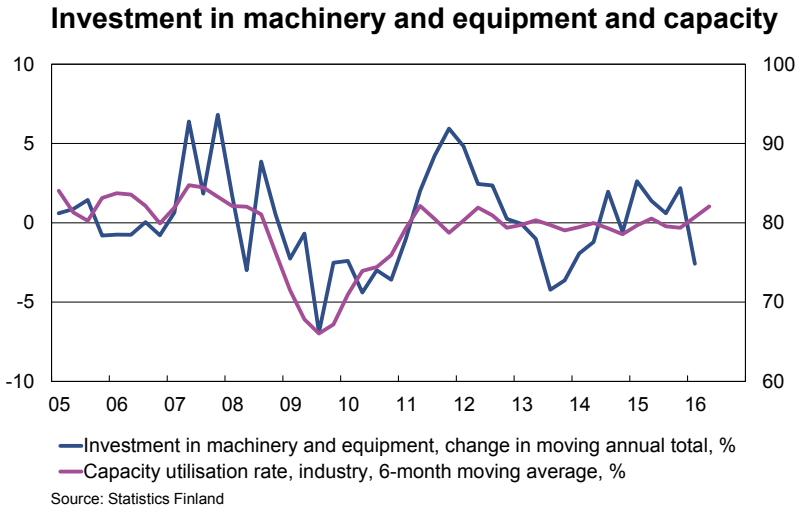
A large number of civil engineering projects are in the planning stages or have recently started up. Several new projects will be launched in 2017. Major regional construction projects are also underway or gearing up. In the energy sector, new civil engineering investments are being lined up in connection with the electricity transmission network, liquefied natural gas terminals and wind power, for instance.

### Broad-based growth in machinery and equipment investments

It is projected that investment in machinery, equipment, transport equipment and weapons systems will accelerate to brisk growth in the next years ahead. Although deep in the red in Q1, machinery and equipment investments will recover to record annual growth on the back of investments in the forest industry. The single most significant factor is the new bioproduct mill under construction in Äänekoski, where machinery and equipment acquisitions are estimated to come in at EUR 750 million, accounting for almost 10% of the total annual investment. Acquisitions of mobile work machinery and trucks have also developed well, whereas demand for semi-trailers and buses and coaches has been weaker than last year.

The most recent Confederation of Finnish Industries (EK) survey in June 2016 showed that investment for the current year was on a growth track of over 10%. According to the survey fixed industry investment in Finland returned to clear growth last year. This is reflected above all in a strong 7% growth rate for machinery and equipment investments in 2015. The survey results show that capacity utilisation rates have risen by a couple of percentage points compared with June last year. The rates are particularly high in the machinery industry and other traditional metal industry sectors.

The outlook predicts that the strong quarterly growth of investment in machinery, equipment, transport equipment and weapons systems will come to a halt in 2017. It is predicted that growth will return to a well above average level in 2018, with the rebounding global economy bolstering Finnish export demand.




## R&D investment not to return to growth until 2017

R&D investment will continue to fall in 2016 with the continuing redundancies of private sector research staff and cutbacks in central government R&D funding. According to the EK investment survey the chemical industry looks set to increase its investment this year, whereas investment in the technology industry will fall by more than 5%. However the forecast is that R&D investment will return to growth in 2017 and gather further momentum in 2018 on the back of the improving global economy.

Statistics Finland reports that 55% of companies surveyed in 2012–2014 were engaged in innovation activity. Involvement in innovation was more common in industrial companies than in service companies. In industry, R&D investment was more common in the electrical and electronics industry and the chemical and textile industries. In services, Statistics Finland found that innovation was most common in software production, insurance and financial intermediation, information service activities, telecommunications and in R&D. The majority of innovating companies invested in R&D projects generating environmental benefits. The biggest motives for investment were high energy, water and materials costs, environmental regulations and corporate reputation benefits.

**Table 8. Fixed investment by type of capital asset**

| | 2015 share, % | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|---|
| | | Change in volume,% | | | | | |
| Buildings | 44.9 | -5.0 | -5.2 | -0.4 | 8.3 | 4.1 | 3.2 |
| Residential buildings | 26.7 | -5.3 | -6.9 | 0.0 | 9.0 | 4.0 | 2.5 |
| Non-residential buildings | 18.2 | -4.6 | -2.7 | -1.1 | 7.3 | 4.3 | 4.3 |
| Civil engineering construction | 10.3 | 2.2 | 4.1 | 2.4 | 2.9 | 2.6 | 1.1 |
| Machinery and equipment | 23.4 | -8.7 | -1.8 | 7.0 | 1.9 | 2.4 | 2.8 |
| R&D-investments* | 21.4 | -3.7 | -0.4 | -4.0 | -1.0 | 2.7 | 3.3 |
| Total | 100.0 | **-4.9** | **-2.5** | **0.7** | **4.3** | **3.3** | **2.9** |
| Private | 80.9 | -6.6 | -3.4 | 2.2 | 4.3 | 3.9 | 3.8 |
| Public | 19.1 | 2.6 | 0.9 | -5.1 | 4.3 | 0.6 | -0.8 |
| | | % | | | | | |
| Investment to GDP ratio (at current prices) | | | | | | | |
| Fixed investment | | 21.2 | 20.6 | 20.4 | 21.2 | 22.0 | 22.6 |
| Private | | 17.0 | 16.4 | 16.5 | 17.2 | 17.9 | 18.6 |
| Public | | 4.2 | 4.2 | 3.9 | 4.0 | 4.1 | 4.0 |

* Includes cultivated assets and intellectual property products

### 1.3.4 Public investment

Public investment fell by 5% last year. This was due to sales of real estates by authorised pension providers, which are recorded as negative investments, and to a substantial decrease in central government investment. In 2016 public investment will rebound to its earlier level. After the current year the total volume of public investment is hardly expected to increase. The public investment to GDP ratio is around 4%.

The Government's commitment to spend around EUR 600 million in transport infrastructure maintenance in 2016–2018 will contribute to maintain central government investment. Overall investment will not increase, however, because there are very few new infrastructure projects and because R&D funding is decreasing. Investment in weapons systems may increase somewhat.

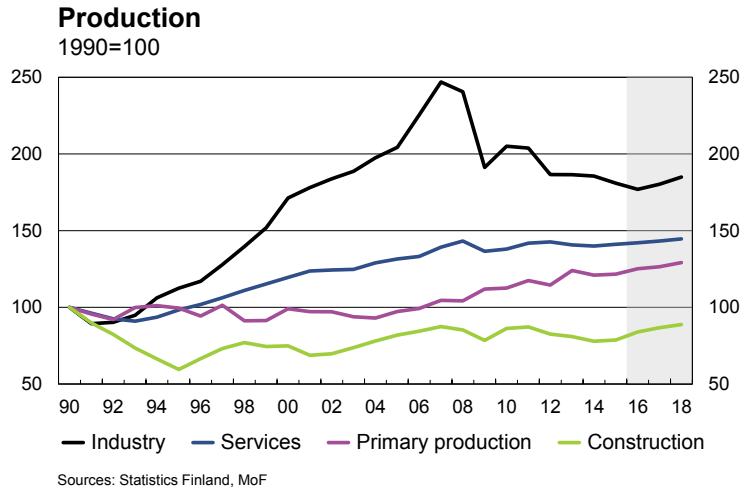
Local government investment expenditure has long been rising very sharply. In 2015, however, investment stopped growing, and it is projected that the growth rate over the next few years will be clearly more moderate. Despite fiscal adjustment, investment will continue to remain at a high level in the local government sector. Maintenance and repairs of the local government building stock require substantial investment. In growth centres new building construction and infrastructure investment will continue at a high level over the years ahead.

## 1.4 Domestic production

### 1.4.1 Total output

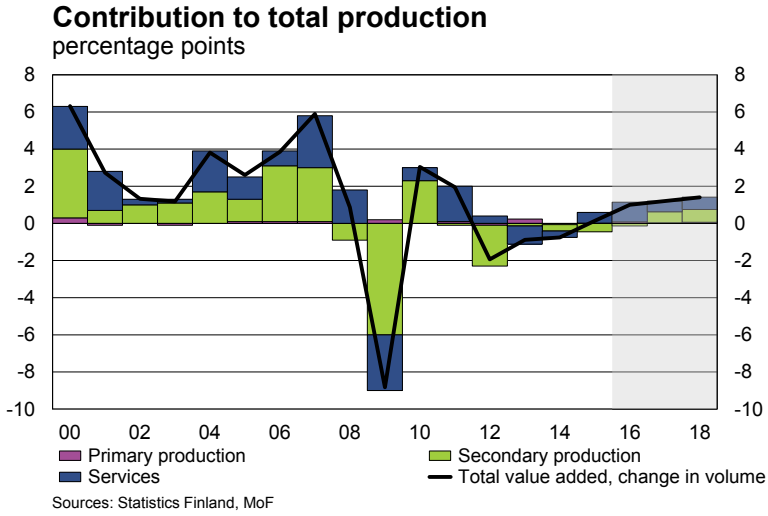
Economic growth driven by production serving domestic demand

The Finnish economy moved out of recession in late 2015. However growth has been subdued. Provisional data indicate that in April-June, output for the total economy increased by 1.3% on the year before, with the thrust of this growth coming from secondary production and services. In secondary production sectors construction output has shown particularly strong growth, reaching almost 6% in Q1. Growth in construction has been broad-based in that both housing development and production-related construction have increased. Service production growth was driven by business services. Industrial production, by contrast, has continued to fall, with all main sectors recording a disappointing performance. In the first half of 2016 gross value added for the economy increased by over half a per cent from the year before.

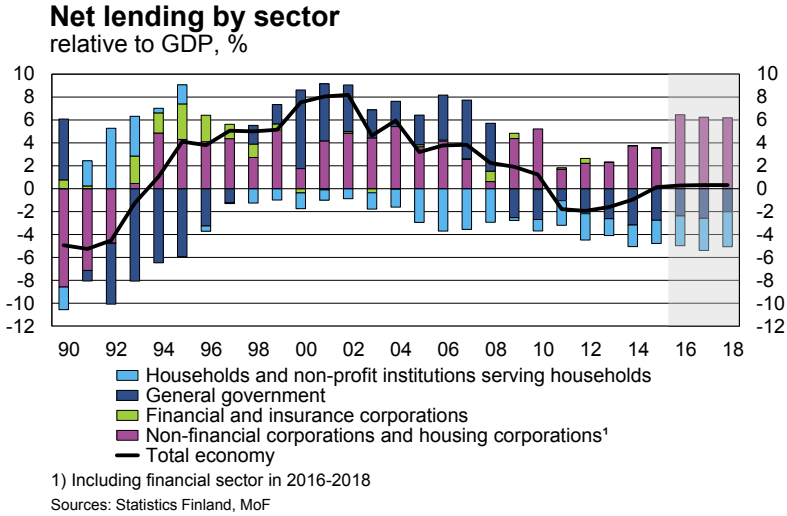



Sources: Statistics Finland, MoF

Over the summer it became increasingly clear that the main driver of growth is production serving demand in the domestic market. The outlook in construction and sales expectations in service branches have improved at the same time as the value of new orders in industry is continuing to fall. According to business tendency surveys shortage of demand is clearly a smaller obstacle to growth than earlier. Among the main sectors of the economy it is surprisingly service branches that most often feel hampered by lack of demand: one in three service companies cite lack of demand as an obstacle to growth. In the construction sector, one in three companies responding to the survey are hampered by the shortage of skilled labour. There are no prospects of a quick rebound in industry, where order books remain lower than normal and stockpiles of finished goods have furthermore remained at close to normal levels. In addition to the above mentioned cyclical barriers to growth, the Finnish economy is hampered by restructuring that is causing capacity problems, especially in the paper and electronics industries.



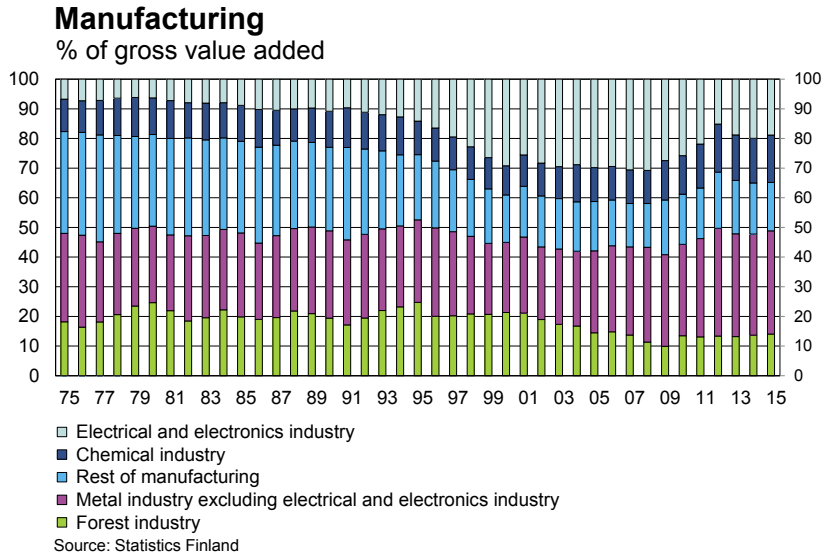

In the first half of 2016 quarter-on-quarter total value added growth was zero in Q1 but picked up to 0.3% in Q2. Growth will continue to accelerate in the second half of the year on the back of improving performance in construction and business services. In 2016 growth will be driven above all by construction and service production geared to meeting domestic demand. GDP will increase by one per cent in 2016. In 2017 and 2018, industrial output will bolster GDP growth, which will come in at over 1%. Output will be 4% lower than the peak performance figures of 2008. The Competitiveness Pact is a step in the right direction to improving cost competitiveness, but it will take some time for its effects to be fully felt because in the current economic situation, output growth is being hampered by lack of demand.



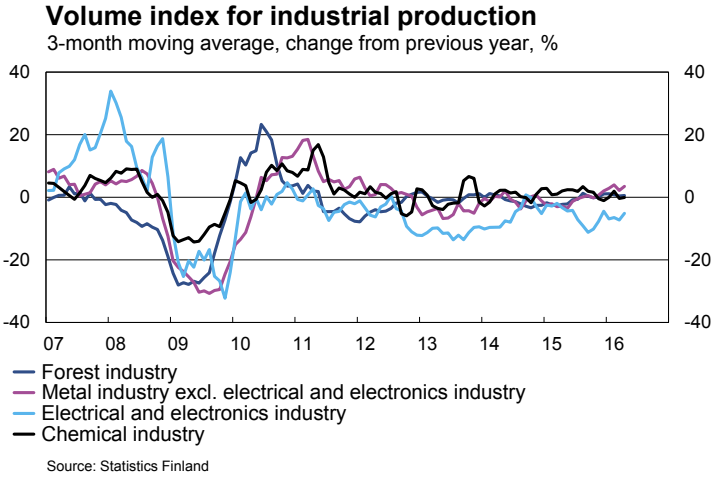
### 1.4.2 Secondary production

#### Industry orders slow to come in

Industrial output is set to decline for the sixth year in succession. This is due both to the weakness of the global economy and the production structure in industry. The bulk of production consists of raw materials and investment goods that are exported, and demand for neither is currently increasing very rapidly. Furthermore global competition is intense in several products.



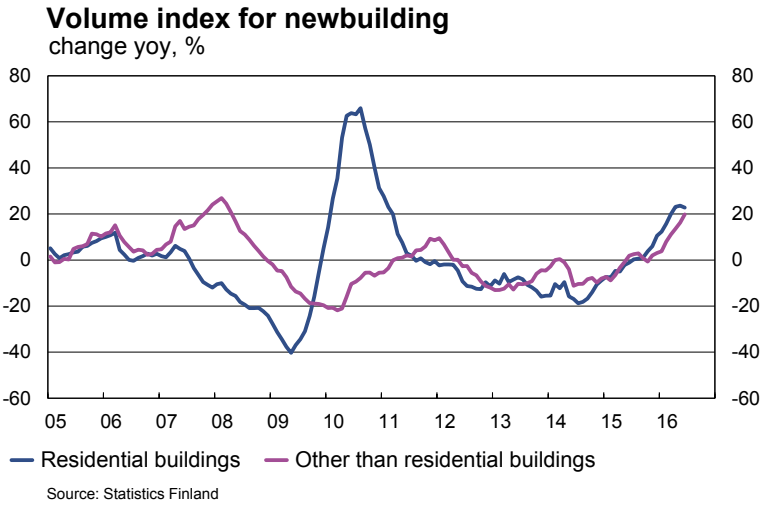

The outlook for industrial production in 2016 is subdued. Export demand is weaker than normal, many companies are facing competitiveness issues, and competition for market shares is intense. Indeed, the outlook for industry has not improved at all from earlier in the year. Industrial companies are expecting to see a fall in their output late in the summer and a modest improvement towards the end of the year. Production expectations are strongest in the chemical industry, but even there an improvement is not expected until late in the year. The metal industry has the most negative outlook and does not expect to see an increase in its output in 2016. Overall industrial production will decline by 2% this year.




In 2017 export demand is set to record its strongest growth since 2011 as imports in emerging economies rebound from the dip this year. Due to competitiveness issues and structural changes in demand, production in export companies will still not reach the same rate of growth as global trade, and therefore the rebound of industrial production will be subdued and come in small steps. Furthermore, the sectors that used to be the main drivers of the economy have scaled down their production capacities in Finland. Therefore industrial production will increase by some 2% in 2017 and by 3% in 2018. The outlook for production is strongest in the pulp industry, where production capacity is increasing, and in the chemical industry. Despite the growth, the volume of industrial output in 2018 will be one-quarter lower than in the peak year of 2007.

### Construction going strong

Construction output returned to growth last year and has accelerated considerably during the current year. This growth is being driven not only by new construction of residential and other buildings, but also by renovation especially in residential and office buildings. Furthermore, government investment in infrastructure is boosting civil engineering works. The number of construction companies reporting scarcity of demand as a barrier to growth is down to one in four, at the same time as access to skilled labour is increasingly reported as a problem, by around one-third of construction companies. However, levels of new building construction are higher in growth centres than outside them, which means that growth is unevenly distributed.



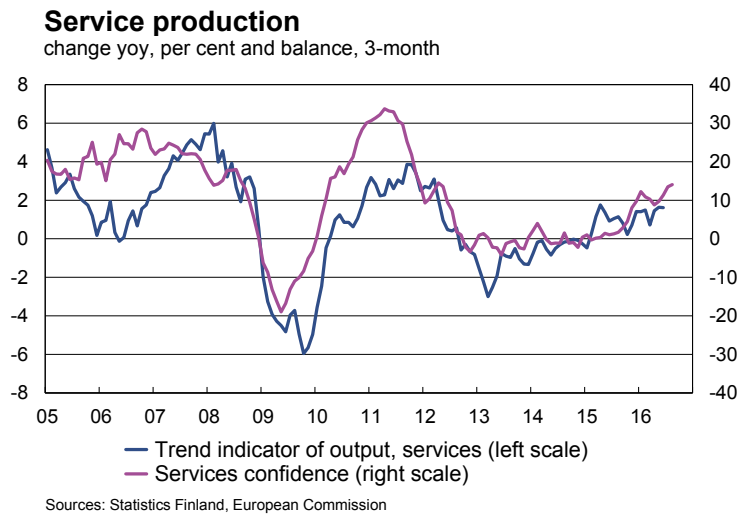

The outlook for construction output is clearly positive, even though output growth is not expected to accelerate further in the second half of the year. The number of planning permissions granted has shown double-digit growth, and the construction of residential and business premises in particular is projected to increase. The strong cyclical upswing will drive construction output to growth of 6½% this year.

Construction will remain strong in 2017 and 2018, although the number of new starts will no longer increase at the same rate as this year. Therefore output growth will slow somewhat. In 2017 construction output will grow at a rate of 3% and in 2018 at a rate of 2%. As a result 2018 value added in the construction sector will exceed the 2007 figure by one per cent.

### 1.4.3 Services

#### Private services set to grow

Private service production is increasing at the same time as public service production is being curtailed. The share of services in Finnish GDP continued to increase last year and now stands at over 70%, close to the euro area average of 74%. Service production increased by 0.8% last year. Output increased especially in information and business services, but declined in transport and public services. Service production in January–June was up 1.2%. The outlook for services has improved appreciably. The number of service companies expecting to see improved sales in the latter half of the year is clearly higher than last year. However lack of demand is the biggest barrier to growth in services, and profitability is expected to improve only marginally. The development of service production is dependent on secondary production and consumption demand. Most services are used in the business sector, and therefore it is necessary for business to rebound before service production can expect to see stronger growth.




Sources: Statistics Finland, European Commission

The outlook for sales growth is strongest in information and communications services for business as well as in financial intermediation and insurance services. The hotel and restaurant sector is also expecting to see growth. The outlook for trade remains subdued because wholesale is declining and because consumer purchasing power is developing weakly.

Service production growth will remain subdued because of the weakness of industrial production: overall service production will increase by less than one per cent this year. In 2017 the rebound of business activity will provide a slight boost to service production, which will continue on a steady 1% growth path in 2018. Just as construction, service output will exceed its pre-crisis level.

### Table 9. Production by industry

| | 2015 share, %[1)] | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** | Average 2015/ 2005 |
|---|---|---|---|---|---|---|---|---|
| | | change in volume, % | | | | | | |
| Industry | 20.6 | 0.0 | -0.5 | -2.5 | -2.2 | 1.9 | 2.6 | -1.2 |
| Construction | 6.3 | -2.0 | -3.7 | 1.0 | 6.6 | 3.2 | 2.4 | -0.4 |
| Agriculture and forestry | 2.5 | 8.3 | -2.5 | 0.6 | 3.0 | 1.1 | 2.1 | 2.3 |
| Industry and construction | 26.8 | -0.5 | -1.3 | -1.7 | -0.5 | 2.2 | 2.5 | -1.0 |
| Services | 70.6 | -1.4 | -0.5 | 0.8 | 0.8 | 0.8 | 0.9 | 0.7 |
| Total production at basic prices | 100.0 | -0.9 | -0.8 | 0.1 | 1.0 | 1.2 | 1.4 | 0.3 |
| GDP at market prices | | -0.8 | -0.7 | 0.2 | 1.1 | 0.9 | 1.1 | 0.4 |
| | | | | | | | | |
| Labour productivity in the whole economy | | 0,5 | -0,1 | 0,2 | 0,0 | -0,3 | 1,0 | 0,2 |

[1)] Share of total value added at current prices.

## Competitiveness between companies in the light of survey results

Competitiveness between companies can be measured in various different ways. From the macro perspective, one of the most common methods of measurement is to examine the development of unit labour costs. Unit labour costs usually describe average relative cost trends for the sector concerned. According to the most recent MoF forecast, the nominal unit labour costs for the Finnish economy will fall by 0.7% from 2015 to 2017, at the same time as the EU Commission's Spring Forecast predicts an increase of 3.1% for Sweden, 4.2% for Germany, and 2.0% for the euro area on average.

Changes in sectoral unit labour costs shed no light on other factors impacting competitiveness. These include the desirability or quality of products, marketing, branding, availability, etc. Organisational competitiveness also impacts on companies' export success via productivity. In addition to the internal production process, this competitiveness is impacted by solidity and legislation, for example.

The following examines industrial companies' current perceived competitiveness as compared with their perceived long-term competitiveness on average. The comparisons are based on the results of the EU Commission's quarterly business tendency surveys. One outcome measure of the survey is the industrial company's perceived relative competitive position by main industrial groupings (MIG). Industrial companies participating in the survey are asked to assess their perceived competitive position separately in the domestic market, in the EU internal market and in non-EU markets. The focus here is restricted to perceived industry competitiveness outside the domestic market. In Finland, responses are obtained from some 700 industrial companies. The corresponding questions are not presented to companies in other branches.

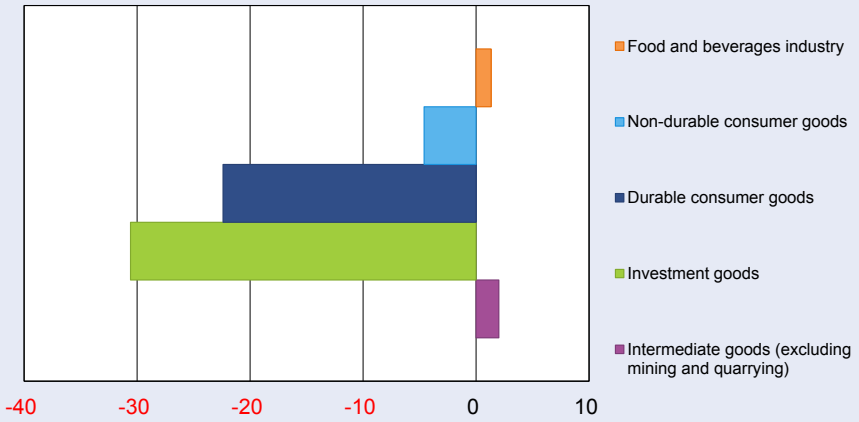
According to the latest results in July, Finnish industrial companies producing foods and intermediate goods for the EU internal market rated their competitiveness as average in comparison with other firms operating in the internal market (see Figure 1). Companies producing consumer goods and especially investment goods, on the other hand, thought their competitiveness in the internal market was clearly weaker than average.

In non-EU markets, by contrast, intermediate goods producers thought their competitiveness was stronger than average (Figure 2). Producers of investment goods rated their competitiveness in non-EU markets as weak, just as they did in the internal market. This is a crucial result for Finnish commodity exports in that raw materials and investment goods constitute the bulk of our export companies' output: in 2015 they accounted for 88.1% of the total value of Finnish goods exports. Consumer goods account for just over 10%.

When examined by sector, companies in the chemical and building material industries rated their competitiveness as stronger than average in the EU internal market. Companies in the textile, forest and basic metal industries, on the other hand, rated their competitiveness as weaker than average. In non-EU markets, companies in the forest, chemical and furniture industries as well as certain companies in the base metal industry thought their competitiveness was stronger than average. Companies in the textile, printing and motor vehicle industries rated their competitive position as weaker than average.

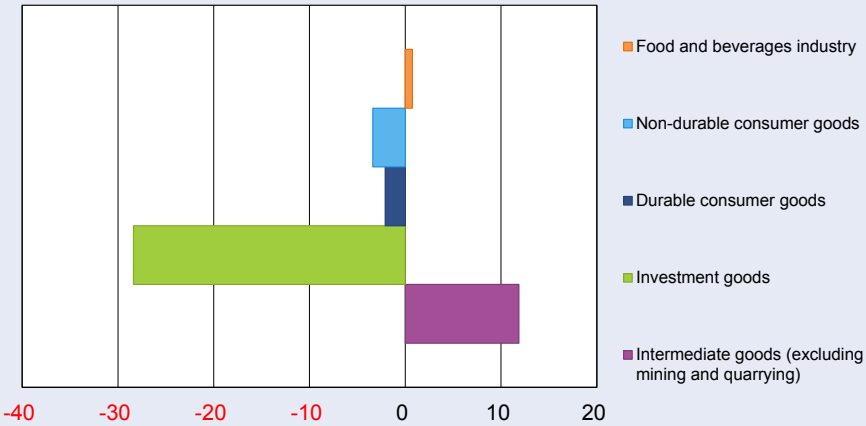
Different competitiveness indicators paint slightly different pictures of the competitiveness of Finnish industrial companies. In 2015–2017 unit labour costs in Finland will increase at a somewhat slower rate than in the euro area on average. The Competitiveness Pact signed in June 2016 will contribute to strengthen Finnish competitiveness vis-à-vis the rest of the euro area. Based on the results of business tendency surveys, however, Finnish industrial companies feel their competitiveness is poor, especially in the case of investment goods, both in the EU internal market and in non-EU markets.

**Competitive position inside EU**
deviation from the long-term average, saldo




Source: European Commission

**Competitive position outside EU**
deviation from the long-term average, saldo



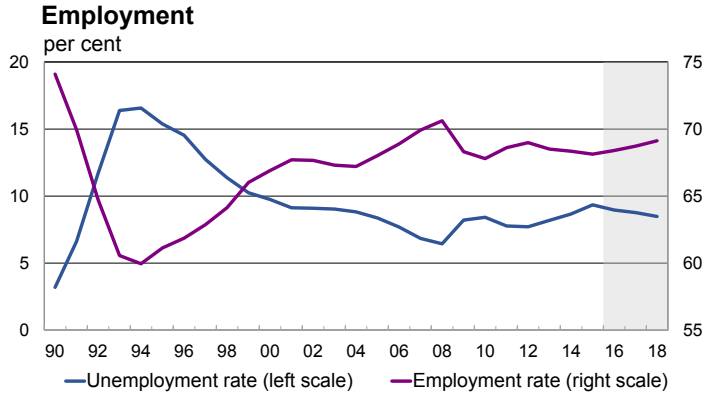

Source: European Commission

## 1.5 Labour force

### Job vacancies and number of hours worked on the increase

The employment outlook has improved in the first part of the year, with the exception of long-term unemployment which is continuing to grow. As the Finnish economy emerges from a sustained period of recession and economic activity continues to rebound especially in the construction sector, the number of hours worked has already started to increase: the figure for January–June was up 3.4% from the corresponding period last year. The number of job vacancies in January–June is also up from the year before. Increasing demand for labour will turn employment to modest growth of 0.4% this year.

Unemployment growth has come to a halt in the first half of 2016, according to both Statistics Finland's sample-based Labour Force Survey and employment service statistics compiled by the Ministry of Employment and the Economy. In 2015 the unemployment rate climbed to 9.4%, but in June this year the trend of the unemployment rate fell back to 8.9%. It is predicted that unemployment will fall slowly over the rest of the year as some of the disguised unemployed will probably return to actively searching for work with the increasing number of job vacancies. The projected unemployment rate for the current year is 9.0%.




Unemployment rate = Unemployed / Labour force (15-74 yrs)
Employment rate = Employed / Population of working age (15-64 yrs)
Sources: Statistics Finland, MoF

Moderate GDP growth in 2017 and 2018 will be strong enough to keep employment on an upward trend and at the same time to slowly reduce the number of unemployed people. In the absence of more robust economic growth, however, unemployment will remain high throughout the outlook period. Employment is predicted to improve by 0.3% in 2017 and by 0.5% in 2018. The unemployment rate is expected to fall back to 8.8% in 2017 and further to 8.5% in 2018.

Long-term and structural unemployment have continued to grow. In June the number of people who had been out of work for more than a year was 127,000, some 17,000 more than one year earlier. According to the Ministry's employment service statistics the number of structurally unemployed people in June was 217,000, or 4,000 more than the corresponding figure last year. In recent years long-term unemployment has increased in all age groups, but most of all among those aged 25–54. Despite the improving economy, the high level of structural unemployment will slow the decline in the unemployment rate.

Despite the improved employment outlook, broad unemployment or the total number of unemployed job seekers and those under activation programmes has remained extremely high at over 450,000. Apart from the weakness of the economy in general, another obstacle to an improvement in the employment situation is presented by regional and occupational mismatch problems between unemployed job seekers and job vacancies. Ministry data for April–June indicate that the number of job vacancies has continued to increase, but this has had little effect on the number of unemployed persons in employment service statistics. In the construction sector there are 20,000 people out of work at the same time as some areas are suffering from shortages of skilled labour.

Steps to lengthen working hours under the Competitiveness Pact will increase the number of hours worked from 2017 onwards, which in the short term may reduce recruitment needs in the private sector and in general government. In the longer term it is thought that longer working hours will have no negative impact on employment, assuming that labour productivity per employed person will improve. Employment growth is in turn supported by the agreement of 0% collective wage increases under the Competitiveness Pact as well as reductions to the employer's social security contributions, which will have the effect of reducing the cost of labour from 2017 onwards. Overall it is estimated that the measures under the Competitiveness Pact will have only a minor impact on employment during the outlook period, as it will take some time for the reduced labour costs to filter through and bolster exports. For the most part the positive effects on employment will not be seen until 2018 and beyond.

Figures for unemployed job seekers registered with employment offices and Statistics Finland's sample-based Labour Force Survey give a slightly different picture of the level and development of unemployment.

At the moment the discrepancy between the unemployment figures reported by Statistics Finland and the Ministry of Employment and the Economy is further accentuated by the fact that some unemployed people have given up their active search for work because of the weak economic situation. The Statistics Finland concept of unemployment is based on the criterion of active search for work during the past four weeks, and the inactive unemployed are classified in the Labour Force Survey as 'disguised unemployed'. The differences between the two sets of figures are also explained by changes in statistical methods and legislation

**Table 10. Labour market**

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | annual average, 1,000 persons | | | | | |
| Population of working age (15-74 yrs) | 4 087 | 4 096 | 4 102 | 4 110 | 4 119 | 4 131 |
| change | 12 | 9 | 6 | 8 | 9 | 12 |
| Population of working age (15-64 yrs) | 3 508 | 3 491 | 3 476 | 3 465 | 3 453 | 3 443 |
| change | -16 | -17 | -15 | -11 | -11 | -10 |
| Employed (15-74 yrs) | 2 457 | 2 447 | 2 437 | 2 446 | 2 454 | 2 466 |
| of which 15-64 yrs | 2 403 | 2 386 | 2 368 | 2 373 | 2 377 | 2 385 |
| Unemployed (15-74 yrs) | 219 | 232 | 252 | 241 | 236 | 228 |
| | % | | | | | |
| Employment rate (15-64 yrs) | 68.5 | 68.3 | 68.1 | 68.5 | 68.8 | 69.3 |
| Unemployment rate (15-74 yrs) | 8.2 | 8.7 | 9.4 | 9.0 | 8.8 | 8.5 |
| | 1,000 persons per annum | | | | | |
| Immigration, net | 17 | 18 | 12 | 15 | 17 | 17 |

# 1.6 Incomes, costs and prices

## 1.6.1 National income

National income refers to domestic primary income, i.e. employee compensations, taxes on production and imports net of subsidies, operating surplus and property income. In 2015 nominal net national income growth increased by 2.0%, compared with 1.7% in 2014. The national income items showing the strongest growth are property income and entrepreneurial income, which were up by 5.7% and 6.1%, respectively, in 2014.

Among the other components of national income, 2015 employee compensations increased by around 1% from the previous year. The wage bill increased by 1.0% and social security contributions paid for the benefit of employees increased by 1.4%. Taxes on production and imports net of subsidies, was virtually unchanged from the year before.

Employee compensations as a proportion of national income amounted to around 60% in 2015. Accordingly, net property and entrepreneurial income as a proportion of national income stood at 24%. The proportion of employee compensations has increased clearly from the figure of around 56–57% in the early 2000s. However the current figure is still a long way away from those recorded in the recession in the early 1990s. The peak figure was recorded in 1991 at 74% of national income.

It is expected that property and entrepreneurial income will continue to increase over the outlook horizon, which will contribute to drive national income. Taxes on production and imports net of subsidies will also continue to increase with the higher rates of indirect taxation.

During the current year it is predicted that wage bill growth will accelerate from the previous year. In 2017, however, employers' reduced social security contributions and moderate wage development will translate into a reduced wage bill. It is predicted that employee compensations as a proportion of national income will fall towards the end of the outlook period with the continued sharp increase in the shares of property and entrepreneurial income.

**Table 11. Disposable income**

| | 2015 share, % | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** | On average 2015/2005 |
|---|---|---|---|---|---|---|---|---|
| | | change, % | | | | | | |
| Compensation of employees | 60.0 | 0.9 | 0.3 | 1.0 | 1.9 | -0.6 | 1.2 | 2.8 |
| Wages and salaries | 48.6 | 0.9 | 0.4 | 1.0 | 1.7 | 0.8 | 1.7 | 2.9 |
| Employers' contributions to social security schemes | 11.3 | 1.0 | -0.2 | 1.4 | 2.7 | -6.5 | -1.0 | 2.3 |
| Property and entrepreneurial income, net | 24.3 | 0.8 | 6.1 | 5.7 | 4.2 | 7.7 | 5.0 | 0.8 |
| Taxes on production and imports minus subsidies | 15.7 | 4.8 | 1.0 | 0.1 | 3.0 | 1.2 | 1.2 | 3.1 |
| National income | 100.0 | 1.5 | 1.7 | 2.0 | 2.6 | 1.7 | 2.2 | 2.3 |
| Disposable income | | 1.0 | 1.8 | 2.1 | 2.7 | 1.8 | 2.2 | 2.3 |
| Gross national income, EUR bn | | 204.0 | 207.2 | 210.9 | 216.0 | 220.6 | 226.4 | |

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

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** | On average 2015/2005 |
|---|---|---|---|---|---|---|---|
| | change, % | | | | | | |
| Index of negotiated wage rates | 1.4 | 0.7 | 0.6 | 0.6 | 0.1 | 0.5 | 2.1 |
| Wage drift, etc. | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 |
| **Index of wage and salary earnings** | **2.1** | **1.4** | **1.3** | **1.2** | **0.8** | **1.2** | **2.9** |
| Real earnings[1)] | 0.6 | 0.4 | 1.5 | 0.8 | -0.3 | -0.1 | 1.3 |
| Average earnings[2)] | 1.6 | 1.2 | 1.3 | 0.7 | -0.7 | 1.3 | 2.1 |
| Labour costs per unit of output[3)] | | | | | | | |
| whole economy | 1.8 | 1.0 | 0.9 | 0.9 | -1.8 | -0.2 | 2.6 |

[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 Wages and salaries

Nominal earnings, as measured by the index of wage and salary earnings, increased by 1.3% last year. The standard wage rate was up 0.6%, and other factors pushed up the wage index by 0.7%.

In 2016 earnings will develop in line with the new wage settlement negotiated by the social partners in June 2015. The Pact for Employment and Growth will push up the standard wage rate on average by 0.6%. The forecast for the development of earnings is based on the assumption that the contribution of factors other than increases to the standard wage rate will drive up earnings by 0.6% a year. Therefore it is predicted that nominal earnings will rise by 1.2% in 2016.

It is expected that the rise in earnings will continue to slow: the projected growth rate is 0.8% for 2017 and 1.2% for 2018. This is considerably slower that the average rate of growth in the 2000s, which is well in line with the current sluggish economy and subdued employment trends.

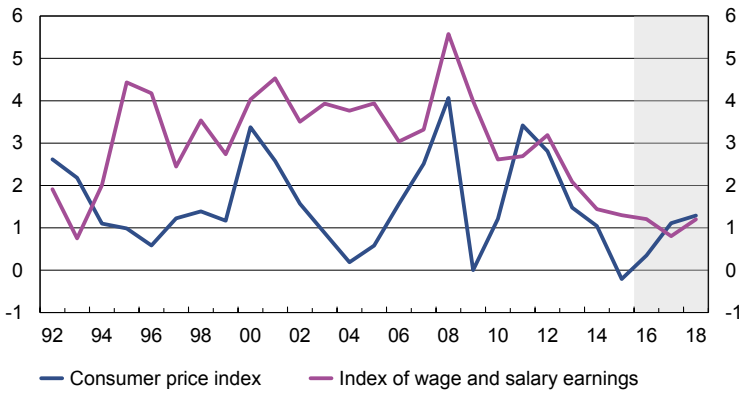
### 1.6.3 Consumer prices

Measured by the national consumer price index, consumer prices rose on average by 0.1% in the first half of 2016 compared with the corresponding period last year. Several factors explain the slow rate of consumer price inflation, but fluctuating world market prices of oil had a major impact. Energy prices were down by an average of 5.7% in the first half of 2016. Goods and food prices also fell. As in earlier years, consumer inflation was mainly driven by higher service prices, which increased by almost 2.5%. The harmonised consumer price index, which in contrast to the national index does not include owner-occupied housing or interests, increased by 0.1% in early 2016.

The inflation forecast for the current year is 0.4% as measured by the national consumer price index. In other words, it is anticipated that consumer prices will rise slowly, but more rapidly than in the first part of the year. Inflation will be driven above all by the price of crude oil, which has risen from its rock bottom level in early 2016. The forecast assumes that the average price of oil in 2016 will be around 44 euros a barrel, compared with the figure of just under 48 euros in 2015. In the last quarter of 2016 it is expected that the price of oil will begin to push up inflation, and that it will continue to have an upward effect through to the end of the forecast horizon.

The price of energy is not the only factor contributing to curb inflation. Food prices have continued to fall as a result of competition in the daily consumer goods sector. Weak demand and the long-term fall in import prices are also impacting goods prices. Furthermore, second-round effects of low oil prices are contributing to slow the prices of other goods. It is projected that service prices will rise by around 2.3% this year, faster than the year before. Increases to social and health care client fees are one contributing factor.

**Consumer price index and index of wage and salary earnings**
change from previous year, %




Sources: Statistics Finland, MoF

It is estimated that tax hikes will push up inflation by 0.6–0.7 percentage points in 2016. Indirect tax hikes adding to inflationary pressure include increases to the annual vehicle tax, tobacco tax and fuel oil tax, but on the other hand the reduction of the motor car tax will act in the opposite direction. The decision to increase the annual ceiling for social and health care client fees will increase inflation by around 0.2 percentage points. Without the effects of these tax hikes, consumer prices would fall in 2016.

Inflationary pressures will remain lower than usual over the next years of the forecast horizon as there are idle resources in the economy and the output gap is still clearly negative. It is expected that the national consumer price index will increase by 1.1% in 2017, and by 1.3% in the last year of the forecast horizon in 2018. Oil prices will edge up over the outlook period and accelerate inflation. The forecast is also impacted by assumptions of moderate wage increases, a weakening euro and low but gradually rising interest rates.

In the first half of 2016 the euro area inflation rate in terms of the harmonised consumer price index came in at 0.0%, and the same trend is expected to continue for the remainder of the year. Falling energy prices have slowed inflation in the euro area, too, but in contrast to the situation in Finland other major items in the consumer price basket have accelerated inflation. The latest ECB forecast is that euro area inflation will rise to 0.3% in 2016, to 1.2% in 2017 and 1.5% in 2018. The comparative MoF growth forecasts for Finland based on the harmonised consumer price index are 0.4% in 2016, 1.1% in 2017 and 1.2% in 2018, so it is expected that prices in Finland will continue to rise somewhat more slowly than in the euro area on average.

### Table 13. Price indices

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** | On average 2015/2005 |
|---|---|---|---|---|---|---|---|
| | change, % | | | | | | |
| Export prices[1)] | -1.1 | -0.3 | -0.9 | -2.0 | 1.3 | 1.4 | 0.4 |
| Import prices[1)] | -1.7 | -1.6 | -4.0 | -2.0 | 1.3 | 1.4 | 0.7 |
| Consumer price index | 1.5 | 1.0 | -0.2 | 0.4 | 1.1 | 1.3 | 1.7 |
| Harmonised index of consumer prices | 2.2 | 1.2 | -0.2 | 0.4 | 1.1 | 1.2 | 1.9 |
| Basic price index for domestic supply | 0.2 | -1.3 | -3.2 | -1.9 | 1.1 | 1.7 | 2.0 |
| Building cost index | 1.0 | 1.0 | 0.5 | 0.5 | 1.6 | 1.7 | 2.3 |

[1)] As calculated in the National Accounts

# 2 Economic policy and public finances

## 2.1 General government finances

General government finances will remain in deficit through to the end of the decade. Successive governments have undertaken substantial fiscal adjustment efforts, but nonetheless failed to significantly reduce the deficit. Slow economic growth is not generating enough tax revenue to finance public expenditure, which is furthermore increasing with population ageing. For these reasons public sector debt has grown rapidly for several years, and the same trend is set to continue in the years ahead. In order to be able to meet the expenditure pressures from population ageing in the coming decades without further adjustment, the budgetary position of general government would need to show a surplus of around 2% of GDP by the beginning of the next decade.

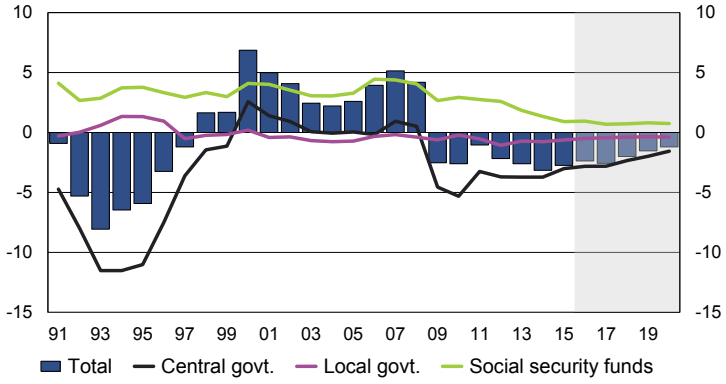
General government in Finland consists of central government, local government, and social security funds. The latter are further divided between earnings-related pension funds and other social security funds.

Within general government, the sector showing the biggest deficit is central government. In 2015, the central government deficit stood at over EUR 6 billion. It is expected that the deficit will shrink to less than half the current figure by the end of the decade. The deficit in local government is also projected to decrease over the forecast horizon. However, the growing demand for social and health care services as a result of population ageing will cause mounting expenditure pressure in the local government sector over the longer term. Nonetheless the combined deficit of central and local government will remain high throughout the outlook period.

The surplus of earnings-related pension funds has decreased in recent years as pension expenditure has grown rapidly and low interest rates have dented investment income. It is projected that the financial position of earnings-related pension funds will continue to weaken over the forecast horizon. Other social security funds have already been in deficit for the past two years because of rising unemployment. During the forecast horizon the position of other social security funds will be boosted by the unemployment insurance contribution hike and the slowly improving employment situation.

The tax rate, i.e. the ratio of taxes and tax-like payments to GDP, is set to fall in the next years ahead. The Competitiveness Pact will significantly reduce the tax rate because the employers' sickness insurance contributions will be lowered and taxes on earned income will be reduced in 2017. The expenditure rate or the ratio of public expenditure to GDP will also fall over the forecast horizon because the Competitiveness Pact will contribute to reduce public sector operating expenditure. Furthermore, fiscal adjustment and cuts to unemployment-related expenditure will lower the expenditure rate.

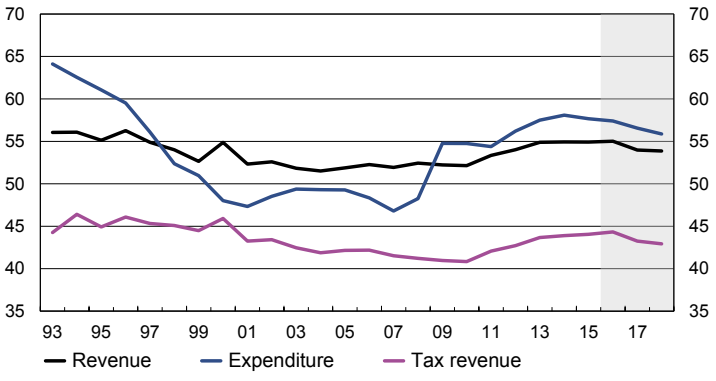
**The financial balance of general government**
relative to GDP, %




Sources: Statistics Finland, MoF

In 2014 the Finnish public deficit exceeded the EU Treaty's 3% of GDP reference value, but in 2015 the deficit came in under that limit. The deficit will remain under the limit throughout the forecast horizon. The public debt to GDP ratio has climbed to over 60%. There is a risk of significant deviation from the structural balance MTO next year. EU procedures are described in more detail in the box on page xx.

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




Sources: Statistics Finland, MoF

## Table 14. General government finances [1)]

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | EUR billion | | | | | |
| Current taxes | 32.9 | 33.8 | 34.8 | 35.5 | 35.5 | 36.3 |
| Taxes on production and imports | 29.3 | 29.6 | 29.7 | 30.5 | 30.8 | 31.1 |
| Social security contributions | 25.9 | 26.3 | 26.9 | 28.0 | 27.3 | 28.0 |
| Taxes and contributions, total [2)] | 88.8 | 90.1 | 92.1 | 94.5 | 94.1 | 95.9 |
| Other revenue [3)] | 23.5 | 23.2 | 23.4 | 23.3 | 23.8 | 24.9 |
| of which interest receipts | 2.5 | 2.1 | 2.0 | 1.9 | 2.0 | 2.2 |
| **Total revenue** | **111.6** | **112.8** | **114.9** | **117.3** | **117.4** | **120.4** |
| Consumption expenditure | 50.3 | 50.7 | 51.0 | 51.6 | 51.1 | 51.8 |
| Subsidies | 2.7 | 2.7 | 2.8 | 2.7 | 2.7 | 2.7 |
| Social security benefits and allowances | 38.4 | 40.3 | 41.6 | 42.6 | 43.7 | 44.6 |
| Other current transfers | 6.0 | 6.1 | 5.8 | 5.6 | 5.3 | 5.3 |
| Subsidies and current transfers, total | 47.2 | 49.0 | 50.3 | 50.8 | 51.7 | 52.7 |
| Capital expenditure [4)] | 9.1 | 9.2 | 9.0 | 9.4 | 9.7 | 9.7 |
| Other expenditure | 10.4 | 10.4 | 10.3 | 10.6 | 10.5 | 10.7 |
| of which interest expenses | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 |
| **Total expenditure** | **117.0** | **119.3** | **120.7** | **122.4** | **123.1** | **124.8** |
| **Net lending (+) / net borrowing (-)** | **-5.3** | **-6.5** | **-5.7** | **-5.1** | **-5.6** | **-4.5** |
| Central government | -7.6 | -7.7 | -6.3 | -6.0 | -6.1 | -5.2 |
| Local government | -1.5 | -1.6 | -1.3 | -1.1 | -1.0 | -0.9 |
| Employment pension schemes | 3.7 | 3.4 | 2.7 | 2.3 | 1.8 | 1.5 |
| Other social security funds | 0.0 | -0.7 | -0.8 | -0.3 | -0.3 | 0.1 |
| Primary balance [5)] | -5.1 | -6.1 | -5.3 | -4.4 | -5.2 | -4.3 |

[1)] As calculated in the national accounts, ESA2010.

[2)] Incl. capital taxes.

[3)] Incl. capital transfers and consumption of fixed capital.

[4)] Gross fixed capital formation and capital transfers.

[5)] Net lending before net interest expenses.

## Table 15. Main economic indicators in general government

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | % of GDP | | | | | |
| Taxes and social security contributions | 43.7 | 43.9 | 44.1 | 44.3 | 43.3 | 42.9 |
| General government expenditure [1] | 57.5 | 58.1 | 57.7 | 57.4 | 56.6 | 55.9 |
| Net lending | **-2.6** | **-3.2** | **-2.8** | **-2.4** | **-2.6** | **-2.0** |
| Central government | -3.7 | -3.7 | -3.0 | -2.8 | -2.8 | -2.3 |
| Local government | -0.7 | -0.8 | -0.6 | -0.5 | -0.4 | -0.4 |
| Employment pension institutions | 1.8 | 1.7 | 1.3 | 1.1 | 0.8 | 0.7 |
| Other social security funds | 0.0 | -0.3 | -0.4 | -0.1 | -0.1 | 0.0 |
| Primary balance [2] | -2.5 | -2.9 | -2.5 | -2.1 | -2.4 | -1.9 |
| General government debt | 55.4 | 59.3 | 62.6 | 64.3 | 65.8 | 66.4 |
| Central government debt | 44.1 | 46.3 | 47.7 | 49.7 | 51.2 | 52.1 |
| General government employment. 1000 person | 633 | 625 | 621 | 617 | 616 | 614 |
| Central government | 142 | 138 | 136 | 134 | 133 | 131.2 |
| Local government | 480 | 477 | 474 | 472 | 472 | 472 |
| Social security funds | 11 | 11 | 11 | 11 | 11 | 11 |

[1] EU-harmonized definition.

[2] Net lending before net interest expenses.

## Table 16. Fiscal balance and debt ratios in some EU economies

| | 2015 | 2016** | 2017** | 2015 | 2016** | 2017** |
|---|---|---|---|---|---|---|
| | Fiscal balance | | | Debt | | |
| | % of GDP | | | | | |
| *Finland | -2.8 | -2.4 | -2.6 | 62.6 | 64.3 | 65.8 |
| Finland | -3.2 | -2.8 | -2.5 | 62.7 | 65.0 | 66.2 |
| United Kingdom | -4.2 | -2.9 | -1.9 | 88.6 | 89.1 | 88.2 |
| Sweden | -1.0 | -1.1 | -1.2 | 44.0 | 43.1 | 42.3 |
| Denmark | -2.0 | -2.7 | -1.9 | 39.9 | 38.3 | 38.8 |
| Ireland | -1.8 | -1.3 | -0.8 | 98.4 | 93.9 | 91.5 |
| Spain | -4.8 | -3.6 | -2.6 | 100.7 | 101.2 | 100.1 |
| Netherlands | -2.2 | -1.8 | -1.5 | 66.8 | 66.2 | 65.1 |
| Luxembourg | 0.2 | 0.5 | 0.5 | 21.3 | 22.7 | 22.0 |
| Portugal | -4.2 | -3.4 | -3.5 | 129.1 | 128.5 | 127.2 |
| Austria | -1.6 | -1.7 | -1.7 | 85.9 | 85.1 | 84.0 |
| Germany | 0.5 | 0.1 | 0.0 | 71.6 | 69.2 | 66.8 |
| France | -3.7 | -3.4 | -3.2 | 96.2 | 96.8 | 97.1 |
| Belgium | -2.9 | -2.8 | -2.4 | 106.1 | 106.6 | 105.6 |
| Italy | -2.6 | -2.5 | -1.5 | 132.8 | 132.4 | 130.6 |
| Greece | -7.6 | -3.4 | -2.1 | 179.0 | 185.0 | 181.8 |

Source: EU Commission forecast spring 2016; *Finland: Ministry of Finance, September 2016

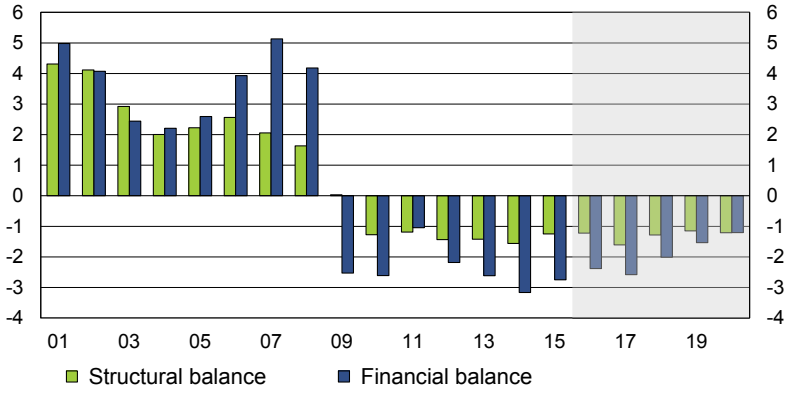
### 2.1.1 Estimates of fiscal policy impact

In 2016 general government fiscal policy will be contractionary. Around EUR 700 million of the Government's fiscal adjustment measures will be targeted at central government. Furthermore, fiscal policy will tighten as a result of local government adjustment measures and the increase to the unemployment insurance contribution. It is expected that as last year, the tax rate in 2016 will be just over 44% of GDP. The tax rate will fall in 2017–2020 in response to changes introduced under the Competitiveness Part to taxes and social security contributions. Furthermore, the most important tax bases such as the wage bill and private consumption will increase more slowly than GDP. The expenditure rate began slowly to fall last year, and the same trend will continue in 2016–2020 in response to savings measures and reduced cyclical expenditure.

The current fiscal policy stance can also be examined against changes in the structural balance as assessed using the EU harmonised method. Structural balance is calculated by removing the cyclical effect from the public sector balance. The remainder describes the effect of the policy pursued and other than cyclical factors on the balance. Changes in the structural balance thus describe changes in the overall fiscal policy stance. When the structural balance strengthens, fiscal policy is contractionary. On the other hand, when the structural balance weakens, fiscal policy is expansionary.

An examination of the fiscal policy stance based on changes in the structural balance does not give the exact same picture as an examination of individual revenue and expenditure measures. No changes are expected in the structural balance this year, which means that fiscal policy can be described as neutral, in contrast to what an assessment of individual measures would seem to indicate. It is forecast that the structural balance will deteriorate clearly in 2017 among other things as a result of lowered taxes and employer contributions. Beyond 2017, it is thought that fiscal adjustment will improve the structural balance. Increasing age-related expenditure contributes to increase the structural deficit throughout the outlook period even in the absence of any decisions to increase expenditure.

**General government financial balance and structural balance[1]**
relative to GDP, %




1) Based on the European Commission's production function approach

Sources: Statistics Finland, MoF

## Damned if you do, damned if you don't – Finland and EU fiscal policy rules

Finland has been having problems with EU fiscal policy rules since autumn 2013. The Commission has reviewed both actual, planned and projected breaches of these rules and warned Member States against failure to comply with the corrective and the preventive arm of the Stability and Growth Pact. So far, though, Finland has managed to remain outside both the excessive deficit procedure (EDP) and the significant deviation procedure (SDP).

In the past three years the Commission has investigated seven potential breaches of the corrective arm of the Stability and Growth Pact, i.e. the 3% deficit and 60% debt ratio reference values set out under Article 126 of the Treaty on the Functioning of the European Union.[1] However a de facto breach has only been identified on one occasion. In spring 2015 it was noticed that the Finnish general government deficit had unexpectedly climbed to 3.2% of GDP. At the same time, the unchanged policy forecast issued ahead of the parliamentary elections in spring 2015 predicted that the deficit would not drop below the reference value in 2015–2019 and that the debt ratio would continue to rise. The Commission re-assessed Finland's situation once the new Government Programme was completed, taking into account the proposed plans for fiscal adjustment. It concluded that all the criteria were now met. The Commission has arrived at the same assessment in its later reports.

At the time that the most recent report was prepared in spring 2016, it was observed that the 2015 deficit came in under the 3% limit. This made it possible to conclude that the 2014 breach of the reference value was close, exceptional and temporary. This means that the deficit criterion is satisfied.

When the deficit criterion is satisfied, only a breach of the debt criterion in the past year (i.e. based on actual figures) can trigger the EDP.[2] The Commission always considers whether the debt criterion is fulfilled when assessing so-called other relevant factors, on which Finland has also offered its own views. Such factors relevant to overruns of the debt reference value, in Finland's view, have included the following:

- Solidarity measures
- Cyclically adjusted debt ratio
- Compliance with the preventive arm

At the time of writing the most recent report in May 2016, the 2015 debt ratio was estimated at 63.1% of GDP. In addition, the Finnish Stability Programme estimates that the debt ratio will rise to 67.4% of GDP in 2018–2019 and only fall back marginally in 2020. In its assessment the Commission states that the 2015 overrun is no longer explained by solidarity measures. On the other hand, cyclical weakness did still explain the 2015 overrun. In addition, the Commission took the view that Finland was broadly compliant with the preventive arm of the Stability and Growth Pact. On these grounds the Commission concluded that Finland currently is in compliance with the debt criterion.

Despite the concerns expressed by the Commission, then, Finland complies with the preventive arm of the Stability and Growth Pact. The assessment of compliance with the preventive rules is based on two pillars: the structural deficit rule and the expenditure benchmark rule. The Commission has been sounding warnings since autumn 2013 about the risk of a significant deviation the structural deficit rule. On the other hand, Finland has so far always complied with the expenditure rule. Based on actual figures the Commission has arrived at the assessment that Finland has complied with the requirements of the preventive arm, at least broadly speaking.

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1 The Commission's article 126(3) reports can be retrieved from http://ec.europa.eu/economy_finance/economic_governance/sgp/deficit/countries/finland_en.htm and the June's addendum from http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/20_scps/2015/26_fi_scp_addendum_en.pdf.

2 The Commission can also assess the risks of the criteria being breached based on planned or projected debt. Furthermore, if the deficit criteria is breached, the planned or projected breach of the debt criterion may also lead to the opening of the EDP based on both criteria.

### 2.1.2 General government debt

General government debt increased to EUR 131 billion last year, more than twice the figure recorded at year-end 2008. At the same time, the public debt-to-GDP ratio breached the 60% reference value set out in the EU Treaty. Public debt continued to increase in the first quarter of 2016 by almost EUR 3 billion from the end of last year, according to Statistics Finland data. It is estimated that the general government deficit is so high that public debt will continue to increase in the years ahead, although the debt rate is projected to plateau in the medium term.

Central government on-budget debt accounts for the bulk of public debt, over EUR 100 billion. Indeed, the public debt forecast is based on projections for central government debt. Local governments also have debts, amounting to a total of almost EUR 20 billion. Social security funds have so far had no debt at all, but in 2014 and 2015 the Unemployment Insurance Fund was forced to borrow to cover the costs of increased outlays on unemployment benefits. This was a temporary move, however, and the debt of social security funds is already decreasing. In addition, general government debt also includes some other items. Debts between general government sub-sectors are consolidated out of the measure of public debt. The biggest single internal general government debt item are investments by earnings-related pension funds in government debt securities. This item has recently decreased considerably.

General government debt to GDP increased by 3.3 percentage points in 2015. The table below describes the factors contributing to the change in the general government debt ratio. The purpose of the table is to clarify the relationship between the general government budgetary position and debt ratio change in the national accounts. A plus sign indicates that the factor has the effect of increasing the debt ratio, a minus sign that it decreases the debt ratio.

**Table 17. Change in general government debt ratio and related factors**

| | 2014 | 2015 | 2016** | 2017** | 2018** | 2019** | 2020** |
|---|---|---|---|---|---|---|---|
| Debt ratio, % of GDP | 59.3 | 62.6 | 64.3 | 65.8 | 66.4 | 66.2 | 65.6 |
| Change in debt ratio | 3.8 | 3.3 | 1.7 | 1.5 | 0.6 | -0.2 | -0.6 |
| Factors impacting change in debt ratio | | | | | | | |
| Primary budgetary position | 1.9 | 1.6 | 1.2 | 1.5 | 1.0 | 0.5 | 0.1 |
| Interest expenditure | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.1 |
| Change in GDP volume | 0.4 | -0.1 | -0.7 | -0.6 | -0.7 | -0.8 | -0.8 |
| Change in GDP price | -1.0 | -1.0 | -0.5 | -0.8 | -1.0 | -1.1 | -1.3 |
| Acquisition of financial assets (net) | 1.7 | 1.3 | 1.1 | 0.8 | 0.7 | 0.7 | 0.6 |
| Other factors [1)] | -0.4 | 0.5 | -0.5 | -0.6 | -0.3 | -0.5 | -0.3 |

[1)] Includes privatization proceeds, lending and factors related to the valuation and timing of revenue and expenditure.

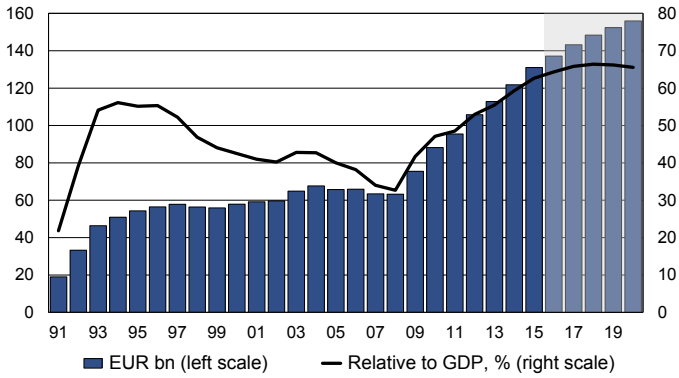
Plus indicates increasing effect on debt ratio, minus a lowering effect on debt ratio.

The general government primary balance (revenue minus expenditure, excluding interest payments) showed a deficit last year, driving debt growth by 1.6 percentage points. Interest payments increased the debt ratio by 1.2 percentage points. When the level of debt is compared with GDP, GDP value growth has the effect of lowering the debt ratio. In 2015 the growth of GDP value reduced the debt ratio by over one percentage point.

Earnings-related pension funds, which come under general government, are running a surplus. In 2015 that surplus was 1.3% of GDP ('Acquisition of financial assets (net)'). Since the surplus of these pension funds is included in the primary budgetary position of general government, but it is not used to pay off general government debt, this surplus must be excluded from the range of factors impacting the change of debt ratio.

In addition to these factors, central government lending and factors related to the valuation and timing of revenue and expenditure increased the general government debt ratio by 0.5 percentage points in 2015.

**General government debt**




Sources: Statistics Finland, MoF

## 2.2 Central government

The national accounts central government deficit figure decreased considerably in 2015. This was largely by virtue of the fiscal adjustment measures adopted by the previous government and a one-off transfer from the State Pension Fund to the central government budget. Central government expenditure did not increase at all, and revenue growth was moderate.

In 2016 economic growth will pick up from last year. At the same time, tax revenue growth is set to accelerate. The fiscal adjustment measures set out in the programme of Prime Minister Juha Sipilä's Government will slow the growth of spending. The central government deficit will decrease.

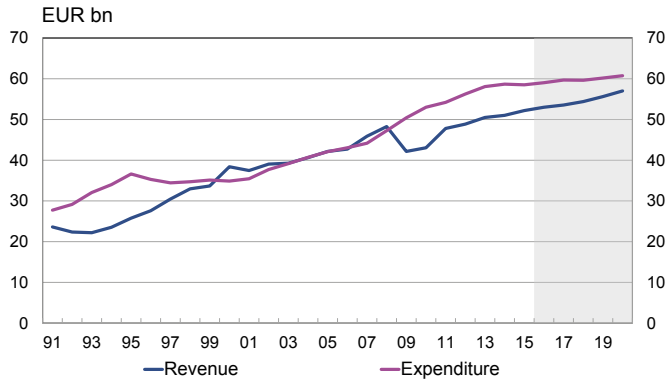
From the beginning of 2017 the Competitiveness Pact and the associated tax cuts will adversely affect the budgetary position of central government. Nonetheless the budgetary position will broadly remain more or less unchanged from the previous year.

Accelerating economic growth over the medium term will start to reduce the central government deficit at a faster rate. Some of the fiscal adjustment measures announced by the Government will take effect after 2017, so their effects on the deficit will only become apparent in the medium term. However the deficit will still be substantial at the end of the decade.

Central government debt has climbed to over EUR 100 billion and in 2017 will rise further to around EUR 111 billion. The amount of debt has doubled in the space of 10 years. As budgets will continue to show deficits through to the end of the decade, central government debt will continue to rise. However the rate of debt accumulation will slow in the medium term. By year-end 2020 central government debt will increase by EUR 24 billion.

State guarantees include all guarantees issued by central government, state enterprises, state-owned joint stock companies and special credit institutions ultimately backed by central government. These guarantees are not an expenditure item and do not show up in the state budget, unless the guarantees are called. The amount of government-issued guarantees has increased rapidly in recent years. At year-end 2015 the stock of state loan guarantees stood at almost EUR 45 billion, or almost 80% of state budget expenditure.

**Central government revenue and expenditure**




Sources: Statistics Finland, MoF

## Table 18. Central government [1)]

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | EUR billion | | | | | |
| Current taxes | 12.2 | 12.6 | 13.0 | 13.6 | 13.7 | 13.9 |
| Taxes on production and imports | 29.3 | 29.6 | 29.7 | 30.5 | 30.8 | 31.1 |
| Taxes and contributions, total [2)] | 42.2 | 42.7 | 43.3 | 44.6 | 45.0 | 45.6 |
| Other revenue [3)] | 8.8 | 8.8 | 9.2 | 8.8 | 8.9 | 9.2 |
| of which interest receipts | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| **Total revenue** | **51.0** | **51.5** | **52.6** | **53.3** | **53.9** | **54.7** |
| Consumption expenditure | 13.7 | 13.7 | 13.7 | 14.0 | 13.8 | 13.8 |
| Subsidies and current transfers, total | 37.7 | 38.2 | 38.2 | 38.1 | 38.8 | 39.0 |
| to general government | 25.8 | 26.2 | 26.2 | 26.6 | 27.4 | 27.5 |
| Interest expenses | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 |
| Capital expenditure [4)] | 4.7 | 4.8 | 4.8 | 4.9 | 5.2 | 5.0 |
| **Total expenditure** | **58.6** | **59.1** | **58.9** | **59.4** | **60.0** | **60.0** |
| **Net lending (+) / net net borrowing (-)** | **-7.6** | **-7.7** | **-6.3** | **-6.0** | **-6.1** | **-5.2** |
| Primary balance[5)] | -5.6 | -5.6 | -4.4 | -4.0 | -4.3 | -3.5 |

[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.

### 2.2.1 Central government expenditure

For the first time in 15 years, central government national accounts expenditure did not increase at all last year. Both current transfers and consumption expenditure, the single biggest items, decreased. A significant number of expenditure adjustment measures introduced by the previous government were scheduled precisely for 2015.

Current transfers account for over half of total central government expenditure. Amounting to over EUR 31 billion, most of these transfers go to local governments and social security funds, but they also include transfers to non-profits institutions, fees paid to the EU, and development aid to foreign countries. Almost one-quarter of total expenditure, close to EUR 14 billion, goes to consumption, i.e. labour costs and acquisitions of production inputs. Other major expenditure items include subsidies paid and property and investment expenditure.

It is projected that with the Government's fiscal adjustment measures taking effect and with the moderate development of costs, expenditure growth will remain slow over the outlook period. Central government expenditure to GDP will fall.

Asylum seekers and the Government's key projects will, among other things, contribute to increase expenditure in 2016. The amount budgeted for the costs of immigration in 2016 is almost EUR 800 million higher than in earlier years, when the number of asylum seekers was considerably lower than in 2015. A total of EUR 1.6 billion is earmarked for the Government's key projects in 2016–2018, including additional investments in transport infrastructure maintenance to reduce the repair debt.

In 2017, increases in central government expenditure will be driven by the financing of key projects, the effects of the Competitiveness Pact, transfers to municipalities for tax compensations, and the growth of pension expenditure. The Competitiveness Pact will increase central government spending because the reduction of employers' social insurance contributions will be offset by increasing central government transfers to the Social Insurance Institution Kela. On the other hand, the pact will also have the effect of reducing expenditure as central government employer contributions will be lowered and holiday bonuses will be cut for a three-year period. Furthermore, it is expected that the introduction of longer working hours will gradually reduce staff numbers and thereby employee compensations paid by central government. The savings measures set out in the Government Programme will also contribute to reduce central government expenditure. The current estimates of the savings effects are somewhat higher than forecast in the spring.

Interest expenses have long been quite moderate because of low interest rates and the country's strong credit rating, even though central government debt has risen appreciably for eight years in a row. In 2015 national accounts interest expenses were almost 4.0% of total expenditure, compared with the peak figure of over 16% in 1997. Interest outlays will remain low in the immediate future because interest rates are low, even though the debt burden will increase every year.

## 2017 State Budget and Central Government Spending Limits

The Government Programme of Prime Minister Juha Sipilä's Government includes a spending limits rule for on-budget expenditure during the whole parliamentary term. The spending limits rule covers some four-fifths of total budgeted expenditure. The purpose of the rule is to ensure a responsible and long-term spending policy that contributes to economic stability.

The 2017 budget proposal is based on the April 2016 general government fiscal plan for 2017–2020. The central government expenditure ceiling takes account of the expenditure savings set out in the Government Programme and in the general government fiscal plan for 2017–2020.

The 2017 expenditure ceiling is set at EUR 44,805 million, of which some EUR 153 million is set aside as an unallocated reserve after the 2017 budget proposal. A further EUR 300 million is reserved for supplementary budget needs. Items excluded from the spending limits rule include expenditure that fluctuates with economic cycles as well as automatic fiscal stabilisers, such as unemployment security expenditure, pay guarantee, housing allowances, and basic social assistance. However expenditure effects resulting from changes to the criteria for these items are included in the spending limits. Also excluded from the spending limits are interest payments on central government debt, VAT expenditure, financial investment expenditure and expenditure corresponding to technically transmitted payments and external funding contributions. Total expenditure outside the spending limits in 2017 comes to around EUR 10.9 billion.

The 2017 budget proposal puts central government expenditure at around EUR 55.2 billion, up by EUR 0.8 billion from the 2016 ordinary budget. Government-agreed savings in central government appropriations, as detailed in Annex 6 of the Government Programme, will increase by a net total of around EUR 0.5 billion compared with savings in 2016. The level of expenditure will be increased, among others, by an increase of over EUR 200 million in appropriations for the Government's key projects from 2016 onwards as well as by changes resulting from the competitiveness package, which will increase net budget expenditure by over EUR 400 million. Spending on renewable energy production subsidies, state pensions and housing allowance and VAT expenditure will also increase. Immigration-related spending is at roughly the same level as in the 2016 ordinary budget. Interest outlays on central government debt come to almost EUR 1.3 billion, some EUR 0.2 billion less than in the current year.

In 2017 it is estimated that on-budget revenue (excluding borrowing) will reach around EUR 49.7 billion and tax revenue around EUR 41.6 billion. Tax revenue is expected to grow by 0.6 billion from the figure budgeted for 2016 (including supplementary budgets). Several tax cuts reduce tax revenue and the continued subdued economic growth dampens the growth of tax bases. Several tax-reducing changes included in the Government Programme will be put in place in 2017. For example, the domestic help credit will be raised and a so-called entrepreneur deduction will be introduced. The increases to the motor car tax and several excise duties shall be continued. On the other hand the levy of excise duty on sweets will be discontinued. Earned income tax rates will be revised to reflect the consumer price index. In addition, taxes on earned income will be eased in order to support the Competitiveness Pact.

The budget proposal for 2017 shows a deficit of EUR 5.5 billion, which will be covered by increased government debt. At year-end 2017 it is estimated that central government debt will be around EUR 111 billion.

The on-budget deficit has decreased by some EUR 0.4 billion compared with the spring 2016 general government fiscal plan. The Competitiveness Pact will adversely affect the on-budget balance, both as a result of increasing appropriations and the associated tax cuts. On the other hand, tax revenue estimates have increased since the spring with better than predicted accrual data. Also the estimate for dividends and sales of shares has increased since spring.

## Factors impacting change in central government on-budget balance compared with spring 2016 general government fiscal plan / Spending Limits Decision, EUR billion

| | 2017 |
|---|---|
| **Estimated balance, general government fiscal plan 14 April 2016** | **-5,8** |
| **Updated expenditure estimate** | **-0,1** |
| Impacts of competitiveness package on central government operating expenditure, central government transfers, universities and universities of applied science funding and expenditure in the administrative sector under the Ministry of Social Affairs and Health | -0,2 |
| Tax compensations for municipalities to offset effects of reduced earned income taxes and taxes on pension income under the competitiveness package | -0,3 |
| Change caused by immigration-related expenditure, taking into account the discharge of the EUR 150 million reserve included in the general government fiscal plan for 2017-2020 | 0,2 |
| Change in projected interest payments on central government debt | 0,1 |
| Other change (net) | 0,1 |
| **Updated revenue estimate** | **0,5** |
| New tax base changes (reduced taxes on earned income and corresponding reduction of taxes on pension income and the postponement of the broadening of the vehicle tax) | -0,3 |
| Changes to miscellaneous revenue and revenue from interests, dividends and sales of shares | 0,5 |
| Other factors impacting revenue estimate (including tax accrual data and new cyclical forecast) | 0,3 |
| **CHANGE TOTAL** | **0,4** |
| **Estimated balance, government 2017 budget proposal 15 September 2016** | **-5,5** |

### 2.2.2 Central government revenues

The greatest part of central government expenditure is funded out of tax revenue. The most significant tax revenue items are taxes on earned and capital income, value added tax and corporate income tax. The development of tax revenue depends largely on the performance of the economy, but tax accrual and the structure of taxation are also affected by government decision-making. In recent years changes the emphasis of taxation has increasingly shifted from direction to indirect taxes.

Tax revenue increased moderately last year when considered against the general performance of the economy. Tax revenue growth was driven by increases in indirect taxes and by strong revenue from corporate income tax. In 2016 tax revenue growth will accelerate clearly as the economy continues to pick up. The most significant discretionary tax measure is the increase to the maximum amount of earned income tax credit, which will reduce government revenue from earned income taxation. There will be both indirect tax hikes and tax cuts.

In 2017 tax revenue growth will slow appreciably, primarily because of the Competitiveness Pact and the associated tax cuts. In the medium term tax revenue will increase on average by 2.3 % a year. The revenue forecasts for the outlook period take account of the discretionary tax measures introduced by the previous and current governments for implementation in 2016–2020.

Other major sources of central government revenue include property income and transfers from the State Pension Fund. Transfers from the State Pension Fund cover 40% of central government's annual pension expenditure. It is estimated that central government property income will decrease slightly this year, but remain relatively stable over the next couple of years.

**Table 19. Forecasts for certain revenue and demand items impacting taxable income and the tax base in 2014-2020, annual change**

| | 2014 | 2015 | 2016** | 2017** | 2020/2017** |
|---|---|---|---|---|---|
| | change, % per year | | | | |
| Taxable earned income and capital income | 0,2 | 2.1 | 2.0 | 1.8 | 2 |
| Wage and salary earnings and other income | 0.3 | 0.8 | 1.5 | 1.4 | 2 |
| Pensions and other social security benefits | 5.5 | 3.2 | 2.6 | 2.2 | 2 1/2 |
| Capital income | 12.6 | 7.8 | 3.4 | 2.8 | 3 |
| Index of wage and salary earnings | 1.4 | 1.2 | 1.2 | 1.0 | 1 |
| Operating surplus | 6.1 | 0.8 | 1.1 | 3.9 | 4 1/2 |
| Value of household consumption expenditure | 0.3 | 0.4 | 0.8 | 1.6 | 2 |
| VAT base | 0.1 | 0.4 | 1.5 | 1.8 | 2 1/2 |
| Petrol consumption | -2.5 | -1.4 | -1½ | -1½ | -2 |
| Diesel consumption | -1.2 | 1.6 | 1½ | 1.0 | 1/2 |
| Electricity consumption | 0.4 | -0 | 3½ | 5½ | 1 |
| Duty-paid alcohol consumption | 0 | -3.6 | -1 | - 1/2 | - 1/2 |
| New passenger cars | 0.8 | 4.5 | 2.2 | 3.7 | 3 1/2 |
| Consumer price index | 1.0 | -0.2 | 0.3 | 1.3 | 1 1/2 |

### Direct taxes

Revenue from earned and capital income taxes will increase slowly in 2016. Tax revenue will be reduced above all by the increase to the maximum amount of earned income tax credit from the beginning of 2016. In 2017 revenue from earned and capital income tax will decrease as a result of the direct tax cuts and changes in fees and payments under the Competitiveness Pact. Wage bill growth is also set to slow next year, which will reduce tax revenue. Other discretionary tax measures set out in the Government Programme will also take effect from the beginning of 2017. Overall these measures will have the effect of easing taxation.

In the medium term, revenue from earned income and capital income tax is projected to increase on average by 2½% a year. The earned income and capital income tax forecast assumes that index adjustments will be carried out in 2018–2020 to ensure that the tax burden on labour does not increase as a result of higher earnings levels.

Revenue from corporate income tax paid by businesses on their profits is shared between central government and local government. From the beginning of 2016, the share formerly allocated to parishes has been replaced by an indexed appropriation.

Revenue from corporate income tax increased sharply last year, and the same trend will continue this year. Central government revenue from corporate income tax will increase with the expiry of temporary tax increases, most notably the expiry of the temporary increase in the share of corporate income tax revenue paid to local governments. With the cuts to contributions introduced under the Competitiveness Pact, business profits will increase and generate greater operating surpluses, which will be reflected in revenue from corporate income tax.

Revenue from withholding tax on interest has fallen sharply in recent years due to low interest rates. It is expected that revenue from withholding tax on interest will only begin to edge up towards the end of the forecast horizon with rising interest rates.

**Table 20. Impact of change in selected tax base items on tax revenue**

| Tax category | Tax base / Demand item | Change | Change in tax revenue, EUR million |
|---|---|---|---|
| Taxes on earned income | Wage and salary earnings | 1-pp | 386 of which central govt. 119 and local govt. 179 |
| | Pension incomes | 1-pp | 125, of which central govt. 30 and local govt. 83 |
| Capital income tax | Investment income | 1-pp | 36 |
| Corporate tax | Operating surplus | 1-pp | 47, of which central govt. 33 and local govt. 14 |
| VAT | Value of private consumption | 1-pp | 121 |
| Car tax | Sales of new cars | thousands | 6 |
| Energy tax | Electricity consumption * | 1% | 9 |
| | Petrol consumption | 1% | 13 |
| | Diesel consumption | 1% | 14 |
| Duty on alcoholic beverages | Alcohol consumption | 1% | 14 |
| Duty on cigarettes | Cigarette consumption | 1% | 9 |

*excl. manufacturing industries, datacenters and greenhouses

## Indirect taxes

The relatively strong growth of private consumption will be reflected in VAT revenue growth this year. On the other hand, VAT revenue will be reduced by slow inflation in the immediate future. In 2017 VAT revenue growth is projected to slow. Two changes will be made to the levying of VAT during the outlook period, which will result in one-off postponements of tax remittance dates to the following year. Firstly, starting from 2017, small businesses will have the option to pay their VAT returns on a cash basis. Secondly, the administration of VAT on imports will be taken over from Customs by Finnish Tax Administration in 2018.

There have been a number of changes to energy taxation in recent years. Taxes on heating fuels were raised from the beginning of this year, while the peat tax was lowered from the beginning of March. The tax on transport fuels will be increased from the beginning of next year.

Various changes will be made to the motor car tax and the annual vehicle tax in the next few years. The motor car tax will be progressively reduced from the beginning of the current year through to 2019. The annual vehicle tax will be raised from the beginning of 2017. Revenue from other excise duties is usually very steady in the absence of tax base changes. The tobacco tax will be raised incrementally from the beginning of 2016 through to 2019.

**Table 21. Central government on-budget revenue: estimates for 2012-2018**

| | 2015 provisional financial accounts | 2016 budget incl. supplementary budget | 2017** | 2018** | 2019** | 2020** | 2020/2016** annual change, % |
|---|---|---|---|---|---|---|---|
| | | | EUR billion | | | | |
| Total tax revenue estimates | 39.9 | 40.9 | 41.6 | 42.1 | 43.4 | 44.6 | 2 |
| Income and wealth taxes[1] | 12.6 | 13.0 | 13.0 | 13.4 | 13.9 | 14.6 | 3 |
| Taxes based on turnover | 17.6 | 17.8 | 18.1 | 18.4 | 19.1 | 19.6 | 2 |
| Excise duties | 6.8 | 7.1 | 7.2 | 7.2 | 7.2 | 7.2 | 1 |
| Other taxes | 3.0 | 3.0 | 3.2 | 3.2 | 3.2 | 3.2 | 1 1/2 |
| Miscellaneous revenue | 6.1 | 5.4 | 5.2 | 5.4 | 5.5 | 5.6 | -2 |
| Interest income and profit entered as income | 2.4 | 2.5 | 2.5 | 2.8 | 1.9 | 1.9 | -3 1/2 |
| **Total revenue estimates** | **49.0** | **49.3** | **49.7** | **50.7** | **51.1** | **52.5** | **1** |

[1] Incl. YLEtax from 2013 onwards (on average 500 EUR million per year).

**Table 22. Impact of discretionary tax measures on general government tax revenue**

| | 2015 | 2016 | 2017** | 2018** | 2019** | 2020** |
|---|---|---|---|---|---|---|
| | EUR million | | | | | |
| Earned income taxes | -184 | -515 | -805 | -150 | -194 | -308 |
| Average increase in municipal tax rate | 101 | 36 | 0 | 0 | 0 | 0 |
| Investment income tax | 100 | 51 | 2 | -9 | 0 | 0 |
| Corporate tax | -85 | 122 | 155 | 0 | 0 | 0 |
| Other direct taxes | -122 | 25 | 49 | -34 | -40 | 0 |
| Value-added tax | 21 | 0 | -156 | -200 | 0 | 0 |
| Energy taxes | 267 | 103 | 116 | 0 | 47 | -2 |
| Other indirect taxes | 156 | 94 | 140 | 70 | 68 | 34 |
| Social security contributions | 375 | 687 | -922 | 185 | -119 | 392 |

### 2.2.3 On-budget accounts and national accounts

The central government on-budget deficit was EUR 4.7 billion in 2015. The corresponding national accounts deficit stood at EUR 6.3 billion. This is quite a noticeable difference. In 2010–2013 the national accounts deficit was smaller than the on-budget deficit, whereas in 2014–2015 the national accounts deficit was larger. No direct inferences can therefore be drawn from the on-budget figures regarding the corresponding national accounts figures.

The national accounts concept of central government is much broader than the on-budget concept. In addition to on-budget entities, the national accounts concept also comprises extra-budgetary funds (excluding the State Pension Fund), universities, property companies, the Finnish Broadcasting Company YLE, VTT Technical Research Centre, and Solidium. From time to time it may be necessary to reassess earlier classifications of public units, especially with the stricter interpretations that took effect in connection with the accounting reform. In 2016 Finnish Industry Investment Ltd is classified in the central government sector and no longer in the financial institutions sector. The public development finance company Finnfund, on the other hand, has not been reclassified from the financial institutions sector. In 2015 the total number of on-budget staff was around 75,000, compared with 135,000 in the national accounts state.

One significant difference between the on-budget net financing requirement and national accounts net lending comes from financial investments. Financial investments such as central government loans and share purchases are entered in the State Budget as expenditures. Loan repayments, revenue from share sales, etc., are accordingly entered on the revenue side. In the national accounts, these items are entered as financial transactions, which do not affect central government's fiscal balance as measured by net borrowing.

National accounts interest outlays in 2015 were EUR 0.76 billion higher than on-budget interest outlays, which is mainly due to the fact that national accounts interest payments do not include the downward effect of interests on derivative instruments (swaps and futures), in contrast to the on-budget figures. By using derivatives, the Treasury has managed to achieve quite a significant reduction in the level of real interest payments from the state budget. In the national accounts, derivative contracts are recorded as financial transactions that have no effect on fiscal balance.

Another significant difference comes from the use of deferrable appropriations. These are two or three-year grants that are entered in the budget for one year only. In the national accounts, deferrable appropriations are entered on the basis of their use. The net effect of deferrable appropriations can vary widely from year to year.

EU countries report twice a year to Eurostat on the differences between their on-budget and national accounts figures. They do this in connection with their deficit and debt reporting. For the past years, Member States are required to provide satisfactory explanations for the difference between the budgetary position indicated by the central government accounts and the net lending figures indicated in the national accounts. The same goes for other sectors of general government finances. Furthermore, the reports provide information on so-called debt dynamics, i.e. on how closely general government net lending matches with the change in public debt. The next round of reports is due at the end of September.

**Table 23. On-budget balance and central government net lending[1)]**

| | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|
| | EUR billion | | | | |
| On-budget surplus (+)/deficitT (-) [2)] | **-6.6** | **-4.7** | **-6.0** | **-5.5** | **-5.1** |
| Privatization proceeds (net proceeds from equity sales) | -0.1 | 0.3 | -0.4 | -0.4 | -0.4 |
| Financial investment, net | -0.7 | -0.6 | -0.8 | -0.6 | -0.7 |
| Rvenue surplus in off-budget units | -1.2 | -0.9 | -0.3 | -0.3 | -0.3 |
| Cash/accrual basis adjustment | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 |
| Other adjustment items [3)] | 0.4 | -0.5 | 1.4 | 0.7 | 1.2 |
| **Central government net lending (+) /-borrowing (-)** | **-7.7** | **-6.3** | **-6.0** | **-6.1** | **-5.2** |

[1)] In national accounts terms.

[2)] Incl. government debt servicing.

[3)] Incl. debt cancellations, profit on reinvested foreign direct investments, super dividends

## 2.3 Local government

The local government sector showed a deficit of 0.6% to GDP last year. The deficit was slightly smaller than the year before. Consumption expenditure increased only marginally because of continuing fiscal adjustment. Cost levels also increased only moderately, which contributed to slow the growth of consumption expenditure. Investment expenditure decreased after strong rises for almost 10 years. The sluggish economy and cuts to central government transfers to local government meant that tax revenue and central government transfers growth were slow.

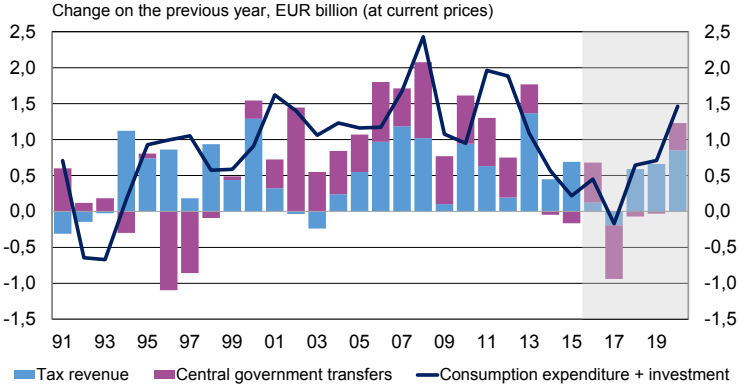
In 2016 the local government deficit will continue to shrink slightly. Consumption expenditure will continue to rise moderately as in recent years. Local authorities will continue to seek greater efficiencies and consolidate their finances by taking steps to curb expenditure growth. Central government actions will also have the net effect of strengthening local government finances. Central government transfers to local governments will be increased as a result of the statutory revision of the distribution of costs between central and local government, in which basic prices and finances are adjusted to reflect actual costs. Local government tax revenue growth, on the other hand, will remain muted because the temporary increase in the share of corporate tax revenue paid to local government expired during the current year. In addition, the average municipal tax rate rose only slightly at the beginning of the year.

### Government Programme adjustment measures will strengthen local government finances

In the next few years the financial position of local governments will remain more or less unchanged at this year's level. The 2017–2020 outlook only considers specified and agreed measures included in the spring 2016 general government fiscal plan or the 2017 budget proposal. It does not include municipalities' and joint municipal authorities' own fiscal measures planned for 2017–2020; their impacts will be taken into account once the budgets have been drawn up. The municipal tax rates are held constant at 2016 level. The outlook does not reflect the social and health care reform nor the reform of regional administration.

**Local government taxes, central government transfers, consumption expenditure and investment**

Change on the previous year, EUR billion (at current prices)




Sources: Statistics Finland, MoF

The direct adjustment measures set out in Annex 6 of the Government Programme will strengthen local government net lending especially in the next few years. On the other hand the programme aimed at achieving savings of one billion euros by reducing municipalities' duties and obligations so far has only limited effect because most of the proposed steps are still under preparation.

Rather more accurate assessments can now be made about the impacts of the direct adjustment measures set out in the Government Programme. It has become apparent that the savings achieved through efficiency measures in specialised health care will be clearly greater than previously thought.

The Government Programme's adjustment measures will slow the growth of consumption expenditure, and the estimated savings will also be taken into account in central government transfers to local government. However, the ultimate impact of the measures proposed to strengthen local government finances will also depend on how they are implemented by autonomous municipalities and joint municipal authorities. Municipal authorities can independently decide to continue to provide a service as before, even if they were no longer obliged to do so or if central government funding were removed. This presents an obvious expenditure risk to the outlook.

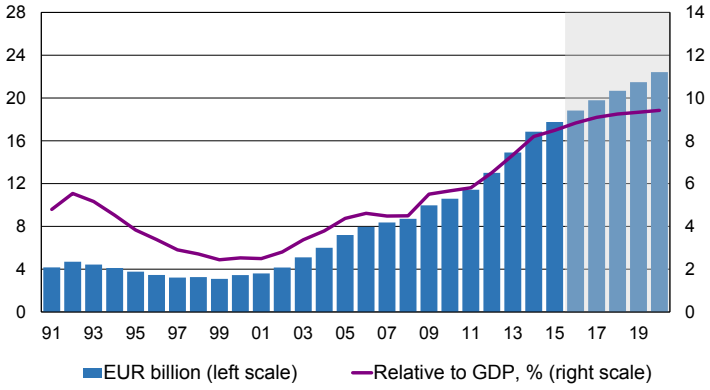
The pension reform that enters into force from the beginning of 2017 will also contribute to strengthen the local government's financial position. The reform will incrementally raise the lower age limit for old-age pension for people born after 1954. Due to the reform the municipal employer's pension insurance contributions will be lowered in 2017.

Local government finances will also be strengthened by municipal employers' lowered pension payments level in 2019. The assumptions underlying the calculation of this payment level have been harmonised with those used in the long-term forecasts of the Finnish Centre for Pensions. The change will strengthen the financial position of local government and accordingly weaken the position of authorised pension providers.

The central aim of the Competitiveness Pact is to increase growth in the economy and improve employment. Local government finances will also benefit from general economic growth and an improvement in the employment rate. The Competitiveness Pact will thus have an overall positive impact on local government finances. The Competitiveness Pact includes elements that in the medium term will both strengthen and weaken local government finances: the agreement will clearly reduce local government consumption expenditure, but at the same time tax revenue and transfers from central government will also decrease.

Changes in the population age structure are increasing the need for care services and therefore adding to expenditure pressures in local government. Likewise, the growth of immigration is increasing the need for municipal services. Investment needs, the repair debt and service and infrastructure development in growth centres all remain at a high level as well. To prevent their finances from deteriorating, municipalities and joint municipal authorities must continue to seek new efficiencies in their service production or reallocate resources from other areas to the provision of social and health care services. Without structural reforms and steps to curb rising expenditures, there will remain substantial upward pressure on municipal tax rates in the long run.

**Local goverment debt**




Sources: Statistics Finland, MoF

## Table 24. Local government [1)]

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | EUR billion | | | | | |
| Taxes and social security contributions | 20.7 | 21.2 | 21.9 | 22.0 | 21.8 | 22.4 |
| of which municipal tax | 17.9 | 18.2 | 18.6 | 18.8 | 18.5 | 18.9 |
| corporate tax | 1.5 | 1.4 | 1.7 | 1.5 | 1.6 | 1.6 |
| real estate tax | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.8 |
| Other revenue [2)] | 18.4 | 18.5 | 18.4 | 19.0 | 18.4 | 18.6 |
| of which interest receipts | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 |
| of which transfers from central government | 13.9 | 13.8 | 13.7 | 14.2 | 13.5 | 13.4 |
| **Total revenue** | **39.1** | **39.6** | **40.3** | **41.0** | **40.2** | **41.0** |
| Consumption expenditure | 33.1 | 33.4 | 33.7 | 34.1 | 33.8 | 34.4 |
| of which compensation of employees | 21.7 | 21.7 | 21.7 | 21.6 | 20.8 | 20.7 |
| Income transfers | 3.1 | 3.1 | 3.3 | 3.3 | 2.6 | 2.6 |
| of which social security benefits and allowances | 1.3 | 1.3 | 1.3 | 1.3 | 0.7 | 0.7 |
| subsidies and oher transfers | 1.6 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 |
| interest expenses | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| Capital expenditure [3)] | 4.5 | 4.7 | 4.6 | 4.7 | 4.8 | 4.9 |
| **Total expenditure** | **40.6** | **41.2** | **41.6** | **42.0** | **41.2** | **41.8** |
| **Net lending (+) / net borrowing (-)** | **-1.5** | **-1.6** | **-1.3** | **-1.1** | **-1.0** | **-0.9** |
| Primary balance [4)] | -1.5 | -1.7 | -1.5 | -1.2 | -1.1 | -1.0 |

[1)] As calculated in the 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.

## Local government accounting and national accounts: how they differ

The closest local government accounting equivalent to the national accounts concept of net lending is the cash flow from operations and investments (financial position). The two accounting systems define sector boundaries differently, and the same goes for the timing of concepts and entries. The reasons for the differences between the cash flow from operations and investments in local government accounting and net lending in the national accounts are examined in the table below.

The most important conceptual difference stems from sector definitions. Local government accounting is concerned with local government finances as defined in the statistics on local government finances, i.e. municipalities, joint municipal authorities and municipal enterprises. Excluded from local government finances under these statistics are such operations that are conducted by an independent legal entity, for instance in the form of a limited liability company. The national accounts definition of the local government sector, on the other hand, does include such municipally-owned enterprises that are treated as units serving their parent entity.

In the national accounts, the local government sector comprises the non-market activities of local and joint municipal authorities, which are primarily financed from tax revenue and by compulsory payments. Public corporations that primarily finance their operations from sales revenue from other sectors, such as water, waste and energy management as well as port activities, are therefore classified in the national accounts in the corporations sector, outside the local government sector.

Statistics on municipal finances and national accounts have different definitions for the concept of investment expenditure. In the national accounts, acquisitions and sales of shares and equities are recorded as financial transactions and not under local government investment expenditure. Statistics on municipal finances, on the other hand, record share acquisitions as investments in fixed assets.

There are also differences in the concepts of property expenditure and incomes. In the national accounts, changes in the value of assets and liabilities are not included in income or expenditure. Therefore, municipalities' and joint municipal authorities' other financing revenue and costs (with the exception of dividends and interests) are not included in the national accounts definition of net lending.

There are also differences in the timing of entries in local government accounting and in the national accounts. In local governments' accounts, tax revenue describes the amount of tax collected during the calendar year. In the national accounts, tax revenue for the year in question is based on the tax authorities' accounts of tax remittances from February through to the end of January the following year. This is intended to take into account the timing difference between advance tax payments and remittance to government.

**Table 25. Financial position in local government accounting and local government net lending**

| | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|
| | EUR billion | | | | |
| **Cash flow from municipalities' and joint municipal authorities' operations and investments** | **-0.1** | **-0.8** | **-0.6** | **-0.4** | **-0.4** |
| Other than municipalities' and joint municipal authorities' net lending effect [1)] | -0.3 | -0.5 | -0.3 | -0.4 | -0.3 |
| Effect of municipalities' and joint municipal authorities' operations outside the local government sector | -0.6 | 0.2 | 0.0 | 0.0 | 0.0 |
| Acquisitions and sales of shares | -0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| Differences in concepts of property expenditure and income | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Timing differences | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 |
| Other differences [2)] | -0.1 | -0.4 | -0.3 | -0.2 | -0.2 |
| **Local government net lending (+)/borrowing (-)** | **-1.6** | **-1.3** | **-1.1** | **-1.0** | **-0.9** |

[1)] Corporations classified under local government but not included in statistics on municipal finances as well as Government of Åland, Association of Finnish Local and Regional Authorities, Local Government Employers and Municipal Guarantee Board.

[2)] E.g. differences in capital transfers and investment grants.

Source: Statistics Finland, MoF

## 2.4 Social security funds

### 2.4.1 Earnings-related pension funds

The surplus of earnings-related pension funds fell to 1.3% of GDP in 2015, compared with the average of around 3% since 2000. Earnings-related pension expenditure has risen sharply in recent years with the growing number of pensioners and with the higher average level of pensions: new, starting pensions are higher than old ones in payment. The weak employment situation and slower rise in earnings have in turn dampened the growth of incomes from contributions, even though pension contribution rates have increased rapidly in recent years. Low interest rates have reduced pension funds' property income. However rising asset prices and stock prices in particular have increased the total value of pension assets to over EUR 180 billion at year-end 2015.

The growing number of pensioners and the higher average level of new pensions will continue to drive earnings-related pension expenditure to average growth of around 4% over the forecast horizon. However, slower inflation and expected moderate rises in earnings mean that annual indexations of pensions will remain at around one per cent in 2016–2020.

In connection with the 2017 pension reform agreement the central labour market organisations agreed on a 0.4 percentage point increase to the private sector earnings-related pension contribution in 2017. In addition, the decision was made to freeze the contribution to this level of 24.4% in 2017–2019. The latest long-term projections by the Finnish Centre for Pensions indicate that this contribution level will be sufficient to finance pensions even beyond 2019. In the medium term, the freezing of pension contributions at the 2017 level will reduce the surplus of pension funds, as the growth-slowing effects of the pension reform on pension expenditure will only begin to take hold in the 2020s.

Moderate wage increases mean that wage bill growth will remain slow despite increasing employment. This will be directly reflected in revenue from pension contributions. It is projected that pension funds' revenue from property income will turn to moderate growth during the outlook period as interest rates begin to pick up. In 2016–2020 the earnings-related pension funds' surplus to GDP ratio will gradually fall from around one per cent to just over half a per cent of GDP. The transfer of part of the contribution burden from employers to employees under the Competitiveness Pact will have no effect on the financial position of earnings-related pension funds.

## Table 26. Finances of social security funds[1)]

| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
|---|---|---|---|---|---|---|
| | EUR billion | | | | | |
| Investment income | 3.7 | 3.5 | 3.4 | 3.2 | 3.5 | 3.9 |
| Social security contributions | 25.9 | 26.3 | 26.9 | 28.0 | 27.3 | 28.0 |
| of which contibutions paid by employers | 17.9 | 17.9 | 18.3 | 18.7 | 17.4 | 17.3 |
| contributions paid by insured | 8.0 | 8.4 | 8.7 | 9.2 | 9.9 | 10.7 |
| Transfer from general government | 13.2 | 13.9 | 14.3 | 14.1 | 15.6 | 15.6 |
| Other revenue | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 |
| **Revenue** | **43.3** | **44.2** | **45.2** | **45.8** | **46.9** | **48.1** |
| Consumption expenditure | 3.5 | 3.6 | 3.7 | 3.5 | 3.5 | 3.6 |
| Social security benefits and allowances | 33.0 | 34.7 | 35.9 | 36.9 | 38.5 | 39.4 |
| Other outlays | 3.0 | 3.2 | 3.7 | 3.4 | 3.4 | 3.5 |
| **Expenditure** | **39.6** | **41.5** | **43.3** | **43.8** | **45.4** | **46.5** |
| **Net lending (+) / net borrowing (-)** | **3.7** | **2.7** | **1.9** | **2.0** | **1.5** | **1.6** |
| Earnings-related pension schemes | 3.7 | 3.4 | 2.7 | 2.3 | 1.8 | 1.5 |
| Other social security funds | 0.0 | -0.7 | -0.8 | -0.3 | -0.3 | 0.1 |
| Primary balance [2)] | 2.0 | 1.2 | 0.5 | 0.7 | 0.1 | 0.1 |

[1)] As calculated in the National Accounts.

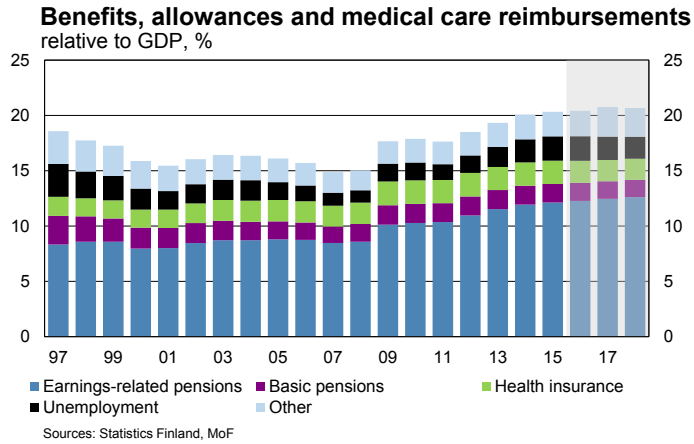
[2)] Net lending before net interest expenses.

### 2.4.2 Other social security funds

Other social security funds consist mainly of the Social Insurance Institution (Kela) and the Unemployment Insurance Fund, which are responsible for the provision of basic security and for earnings-related unemployment security, respectively. Because of the growth of unemployment expenditure, the financial position of other social security funds turned to a deficit of 0.4% of GDP last year, despite an increase in transfers from central and local government.

The deficit of other social security funds will shrink appreciably this year because the unemployment insurance contribution was raised by one percentage point from the beginning of this year. As a result other social security funds will remain close to balance over the forecast horizon. In addition, the growth of unemployment expenditure will slow in 2016, and it is expected that with the gradual improvement in the employment situation, unemployment expenditure will begin to fall from the beginning of 2017. Cuts to earnings-related unemployment security and job alternation leave compensation will also contribute to reduce unemployment spending. Cuts and savings will also be made in medical and health care reimbursements, sickness and parental allowances, general housing allowance and student financial aid. Furthermore, payments of child allowances and student financial aid will no longer be index-linked. The only measure that will drive up expenditure is the increase to the amount of guarantee pension.

Benefits and allowances tied to the national pension index were revised downwards by 0.4% from the start of 2016 in response to falling consumer prices. In line with the Government's spending limits decision in the beginning of April, benefits tied to the national pension index will be cut by 0.85% in 2017 and, in keeping with an earlier decision, will not be increased in 2018–2019. This does not, however, apply to basic income support, payment of which will be taken over from local governments by the Social Insurance Institution Kela from the beginning of 2017. All in all, the measures adopted by the Government will considerably reduce the expenditure of other social security funds at an annual level in 2019. The savings achieved will largely be reflected in a reduced level of central government transfers to other social security funds.



The reduction to the employer's sickness insurance contribution as agreed under the Competitiveness Pact will dent the Social Insurance Institution Kela's revenue by an average of over EUR 800 million in 2017–2019 and by around EUR 500 million from the beginning of 2020, which will be compensated with additional funding from central government. By contrast the partial transfer of the employer's unemployment insurance contribution to employees will have no effect on the financial position of other social security funds.

### Table 27. Social security contributions rates and pension indices

| | 2013 | 2014 | 2015 | 2016 | 2017** | 2018** |
|---|---|---|---|---|---|---|
| **Social insurance contributions** [1)] | | | | | | |
| **Employers** | | | | | | |
| Sickness insurance | 2.04 | 2.14 | 2.08 | 2.12 | 1.06 | 1.13 |
| Unemployment insurance | 2.32 | 2.20 | 2.33 | 2.85 | 2.40 | 2.00 |
| Earnings-related pension insurance | 17.35 | 17.75 | 18.00 | 18.00 | 17.95 | 17.75 |
| Local government pension insurance | 24.00 | 23.79 | 23.65 | 23.21 | 21.95 | 21.75 |
| **Employees** | | | | | | |
| Sickness insurance | 2.04 | 2.16 | 2.10 | 2.12 | 1.60 | 1.72 |
| Unemployment insurance | 0.60 | 0.50 | 0.65 | 1.15 | 1.60 | 2.00 |
| Earnings-related pension insurance | 5.45 | 5.85 | 6.00 | 6.00 | 6.45 | 6.65 |
| **Pensioners** | | | | | | |
| Sickness insurance | 1.47 | 1.49 | 1.49 | 1.47 | 1.45 | 1.52 |
| **Pension indices** | | | | | | |
| Earnings-related index (over 65) | 2475 | 2509 | 2519 | 2519 | 2533 | 2555 |
| National pension index | 1609 | 1630 | 1637 | 1631 | 1617 | 1617 |

[1)] Annual averages. The contributions of employers and the unemployment and employment pension contributions of beneficiaries as percentages of wages and salaries. The figures are weighted averages.

## 2.5 Long-term sustainability of public finances

Despite the growth of public debt to GDP is predicted to come to halt by the end of the decade, it is anticipated that balance will not be restored in public finances in the medium term. The challenge of balancing public finances is further compounded by population ageing, which is driving up pension expenditure as well as health care and long-term care costs. The slowdown of productivity growth and stalling labour input growth are in turn curbing economic growth and therefore slowing tax revenue growth.

The old-age dependency ratio, i.e. the ratio of people aged over 65 to the working-age population (15–64 years), illustrates the challenges to public finances from the ageing population structure. Statistics Finland's 2015 population projection is that this year, there are 33 older people per 100 people of working age in Finland. By 2030, the ratio is expected to increase to 43 and by 2060 to 51 per 100 people of working age.

The long-term difference between general government revenue and spending is measured by the sustainability gap. The sustainability gap indicates the extent of medium-term adjustment necessary in public finances in order to prevent public debt from spiralling out of control, in the long term, when rising age-related expenditure is taken into account. In other words, the sustainability gap is the difference between the deficit in public finances in the start-year (which is currently 2020) and the level of surplus required for sustainable public finances.

A sustainable level of surplus means that the general government balance should show a surplus of around 2% of GDP at the start of the next decade: this would be the level at which the fiscal challenges from population ageing could be readily met in the decades ahead without additional adjustment measures being required. Instead of a 2% surplus, however, it is expected that public finances will show a deficit of over 1% in 2020.

The MoF Economics Department's assessment of the long-term sustainability of public finances is based on EU harmonised methods and calculation rules. The assessment of age-related expenditure is based on a model developed by the Ministry of Social Affairs and Health for social expenditure analysis. By 2030, age-related expenditure is expected to increase from its current level by 1.6% of GDP. By 2060, the forecast indicates an increase of 1.8%.

The long-term background assumptions of the calculation (e.g. employment, productivity, interest rate and inflation) are based on those used in the 2015 report by the EU Economic Policy Committee's Ageing Working Group.[1] The present assessment diverges from these assumptions in two respects: the forecasts for demographic trends are based instead on Statistics Finland's 2015 population projection, and the 2016–2020 projections of economic development are based on the MoF Economic Department's economic forecast and medium-term outlook presented in this Economic Survey. The assumptions underlying the calculation expect an average GDP growth rate of 1.5% in 2020–2060.

It is estimated that the sustainability gap will be just over 3% of GDP at 2020 level. This is unchanged from the forecast presented in the spring. Both the spring and the present sustainability gap estimate take into account the effects of the pension reform that will take

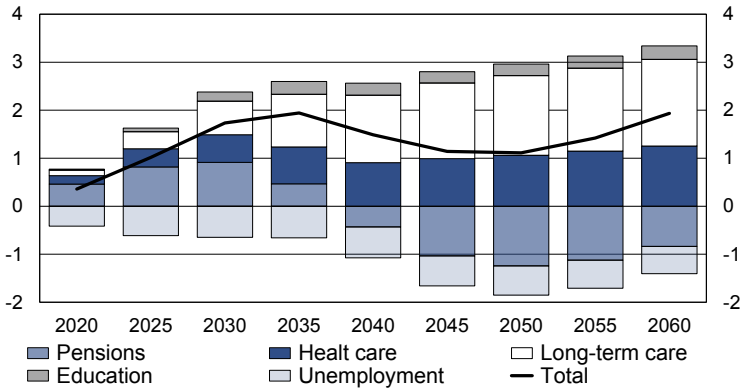
[1] The 2015 Ageing Report: Underlying Assumptions and Projection Methodologies, European Economy 8/2014.

effect from the beginning of 2017: this will reduce the sustainability gap in public finances by around one percentage point. It is anticipated that the reform will both increase the employment rate and reduce pension expenditure. The calculation does not take into account the long-term actions set out in the Government Programme for the improvement of public finances, such as the reform of social and health care services.

The sustainability calculation is effectively a pressure projection in which developments under current legislation and practices are projected to the future with the help of the population projection, the breakdown of spending by age groups, and assessments of long-term economic development. The further one reaches ahead of time, the greater the uncertainty of the projection, which is why the projection is highly sensitive to the assumptions used. Sustainability gap calculations are nonetheless useful tools in providing a consistent way of analysing and overcoming the future challenges that lie ahead for public finances.

**Change in age-related expenditure**

from year 2015, relative to GDP, %




The figure is compiled using the model developed by the Ministry of Social Affairs and Health for social

Source: MoF

# Supplementary statistics

1. Evolution of forecasts over time
2. Outturn data and forecasts used in budget process for 2011-2015, average change, %
3. National balance of supply and demand
4. Financial balance of the Finnish economy

## Table 1. Evolution of forecasts over time[1)]

| | 2015 | | | | 2016** | | | | 2017** | | | | 2018** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | es4 | es1 | es2 | es3 | es4 | es1 | es2 | es3 | es4 | es1 | es2 | es3 | es4 | es1 | es2 | es3 |
| GDP at market prices, change in volume, % | 0.2 | 0.5 | 0.7 | 0.2 | 1.2 | 0.9 | 1.4 | 1.1 | 1.2 | 1.2 | 1.0 | 0.9 | - | 1.2 | 1.3 | 1.1 |
| Consumption, change in volume, % | 1.0 | 0.7 | 0.7 | 1.1 | 0.6 | 0.7 | 1.0 | 0.8 | 0.6 | 0.6 | 0.2 | 0.1 | - | 0.6 | 0.4 | 0.4 |
| Exports, change in volume, % | -1.1 | 0.6 | 0.6 | -0.2 | 1.8 | 1.3 | 0.8 | 1.0 | 2.9 | 2.9 | 2.9 | 3.0 | - | 3.6 | 3.8 | 3.8 |
| Unemployment rate, % | 9.4 | 9.4 | 9.4 | 9.4 | 9.4 | 9.3 | 9.2 | 9.0 | 9.0 | 9.0 | 9.1 | 8.8 | - | 8.7 | 8.7 | 8.5 |
| Consumer price index, change, % | -0.1 | -0.2 | -0.2 | -0.2 | 0.9 | 0.3 | 0.5 | 0.4 | 1.4 | 1.3 | 1.2 | 1.1 | - | 1.5 | 1.3 | 1.3 |
| Central government net lending, relative to GDP, % | -3.1 | -3.1 | -3.1 | -3.0 | -2.9 | -2.9 | -2.9 | -2.8 | -2.7 | -2.6 | -2.7 | -2.8 | - | -2.2 | -2.3 | -2.3 |
| General government net lending, relative to GDP, % | -3.3 | -2.7 | -2.7 | -2.8 | -2.9 | -2.5 | -2.4 | -2.4 | -2.6 | -2.1 | -2.4 | -2.6 | - | -1.8 | -2.0 | -2.0 |
| Central government debt, relative to GDP, % | 48.5 | 48.2 | 48.1 | 47.7 | 49.9 | 50.0 | 49.8 | 49.7 | 51.3 | 51.6 | 51.5 | 51.2 | - | 52.4 | 52.4 | 52.1 |

[1)] Economic Survey / release date: 18.12.2015 (es4), 14.4.2016 (es1), 22.6.2016 (es2) and 15.9.2016 (es3)

Sources: Statistics Finland, MoF

## Table 2. Outturn data and forecasts used in budget process for 2011-2015

| | Years 2011-2015 | | Average forecast errors | |
|---|---|---|---|---|
| | Forecast averages, % ch. | Outcome averages, % ch. | Forecast under-/over-estimation[1], pp. | Magnitude of forecast error[2], pp. |
| GDP (volume) | 1.7 | 0.1 | 1.6 | 1.8 |
| GDP (value) | 3.9 | 2.4 | 1.5 | 2.0 |
| Private consumption (value) | 3.6 | 3.0 | 0.6 | 1.2 |
| Current account, % of GDP | 0.1 | -1.0 | 1.1 | 1.7 |
| Inflation | 2.4 | 1.7 | 0.7 | 1.1 |
| Wage bill | 3.0 | 1.9 | 1.1 | 1.3 |
| Unemployment rate | 8.2 | 8.4 | -0.2 | 0.6 |
| Central government debt, % of GDP | 46.7 | 44.9 | 1.8 | 1.8 |
| Central government net lending, % of GDP | -3.2 | -3.5 | 0.3 | 0.8 |
| General government net lending, % of GDP | -1.6 | -2.3 | 0.7 | 1.1 |

Forecasts are compared with March/July preliminary national accounts data.
Averages for the past five years are calculated on the basis of spring and autumn forecasts concerning the budget year.

[1] Over- or understimation is indicated by average forecast error. [2] The average of absolute error values indicates the average magnitude of forecast errors, regardless of the direction of error.

## Table 3. National balance of supply and demand, EUR million

| | Current prices | | | | | |
|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
| GDP at market prices | 203 338 | 205 364 | 209 149 | 213 167 | 217 601 | 223 454 |
| Imports of goods and services | 80 724 | 79 306 | 77 548 | 77 554 | 80 817 | 84 914 |
| **Total supply** | **284 062** | **284 670** | **286 697** | **290 721** | **298 418** | **308 367** |
| | | | | | | |
| Exports of goods and services | 78 924 | 77 380 | 76 579 | 75 796 | 79 051 | 83 173 |
| Consumption | 161 588 | 164 333 | 166 733 | 169 165 | 170 831 | 173 837 |
| private | 111 277 | 113 622 | 115 711 | 117 578 | 119 651 | 121 926 |
| public | 50 311 | 50 711 | 51 022 | 51 588 | 51 180 | 51 912 |
| Investment | 43 083 | 42 247 | 42 718 | 45 294 | 47 842 | 50 403 |
| private | 34 643 | 33 655 | 34 562 | 36 672 | 39 008 | 41 469 |
| public | 8 440 | 8 592 | 8 156 | 8 622 | 8 834 | 8 934 |
| **Total demand** | **284 062** | **284 764** | **287 531** | **291 555** | **299 252** | **309 201** |
| | At reference year 2010 prices; not additive | | | | | |
| | 2013 | 2014 | 2015 | 2016** | 2017** | 2018** |
| GDP at market prices | 187 738 | 186 409 | 186 801 | 188 779 | 190 416 | 192 553 |
| Imports of goods and services | 75 779 | 75 655 | 77 095 | 78 636 | 80 916 | 83 855 |
| **Total supply** | **263 517** | **262 064** | **263 896** | **267 415** | **271 332** | **276 408** |
| | | | | | | |
| Exports of goods and services | 75 554 | 74 275 | 74 157 | 74 892 | 77 124 | 80 062 |
| Consumption | 147 723 | 148 135 | 149 796 | 151 049 | 151 168 | 151 827 |
| private | 102 348 | 102 978 | 104 474 | 105 761 | 106 479 | 107 140 |
| public | 45 364 | 45 153 | 45 324 | 45 296 | 44 713 | 44 714 |
| Investment | 39 718 | 38 714 | 38 983 | 40 644 | 41 982 | 43 214 |
| private | 31 985 | 30 912 | 31 588 | 32 934 | 34 225 | 35 516 |
| public | 7 728 | 7 794 | 7 393 | 7 708 | 7 756 | 7 697 |
| **Total demand** | **263 383** | **261 865** | **264 385** | **267 901** | **271 719** | **276 655** |

## Table 4. Financial balance of the Finnish economy

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| | relative to GDP, % | | | | |
| **Gross investment** | **22.2** | **22.3** | **21.2** | **20.6** | **20.4** |
| households and non-profit institutions | 6.6 | 6.5 | 6.2 | 5.9 | 5.6 |
| non-financial corporations and financial and insurance corporations | 11.9 | 11.8 | 10.8 | 10.5 | 10.9 |
| general government | 3.8 | 4.0 | 4.2 | 4.2 | 3.9 |
| **Gross saving** [1] | **22.1** | **20.7** | **19.7** | **19.7** | **20.0** |
| households and non-profit institutions | 4.7 | 4.5 | 5.0 | 4.2 | 3.8 |
| non-financial corporations and financial and insurance corporations | 14.7 | 14.3 | 13.2 | 14.5 | 15.0 |
| general government | 2.8 | 1.9 | 1.5 | 1.0 | 1.1 |
| **Financial surplus** | **-1.3** | **-1.8** | **-1.7** | **-1.2** | **-1.1** |
| households and non-profit institutions | -2.1 | -2.3 | -1.5 | -1.9 | -2.0 |
| non-financial corporations and financial and insurance corporations | 1.8 | 2.6 | 2.3 | 3.7 | 3.5 |
| general government | -1.0 | -2.1 | -2.6 | -3.1 | -2.7 |
| Statistical discrepancy | 0.0 | -0.1 | 0.0 | 0.0 | -0.4 |

[1] Incl. capital transfers (net)

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