Europaudvalget 2017
KOM (2017) 0090
Offentligt

EUROPEAN
COMMISSION

Brussels, 22.2.2017
SWD(2017) 91 final

COMMISSION STAFF WORKING DOCUMENT

Country Report Finland 2017
Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE EUROGROUP

2017 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011

{COM(2017) 90 final}
{SWD(2017) 67 final to SWD(2017) 93 final}

CONTENTS

LIST OF TABLES

LIST OF GRAPHS

LIST OF BOXES

EXECUTIVE SUMMARY

This report assesses Finland's economy in the light of the Commission's Annual Growth Survey published on 16 November 2016. In the survey the Commission calls on EU Member States to redouble their efforts on the three elements of the virtuous triangle of economic policy – boosting investment, pursuing structural reforms and ensuring responsible fiscal policies. In so doing, Member States should put the focus on enhancing social fairness in order to deliver more inclusive growth. At the same time, the Commission published the Alert Mechanism Report (AMR) that initiated the sixth round of the macroeconomic imbalance procedure. The in-depth review, which the 2017 AMR concluded should be undertaken for the Finnish economy, is presented in this report.

Following a three-year-long economic downturn, a gradually strengthening recovery started in 2015. The economy is expected to have expanded by 1.5 % in 2016 and is expected to continue to grow in 2017-2018 by 1.2 % and 1.5 % respectively. Domestic demand, in particular construction investment, is expected to be the main driver for growth in the near term, alongside a strengthening export performance. The labour market situation has also started to improve, with a decline in headline unemployment rates, although long-term unemployment continues to increase.

The potential growth rate of the Finnish economy remains close to zero. Potential growth fell significantly from the start of the crisis and remains at a subdued level. This is due to a shrinking working-age population alongside subdued total factor productivity growth following in particular the decline of the electronics and paper industry. Investment has fallen. The increasing public debt could limit the scope for growth-enhancing public investment in the future.

The signing of the Competitiveness Pact between the social partners in 2016 put an end to a period of uncertainty in wage developments. The Pact freezes wages for 2017 and increases annual working time without additional compensation. In addition, employees will be permanently responsible for paying a larger proportion of social contributions. These measures are expected to improve cost competitiveness and support exports and employment in the coming years. For the public sector, the Pact brings cost savings by temporarily reducing employees' annual holiday bonuses. However, these savings are more than outweighed by the reduction in taxes and social contributions which the government introduced as a compensation for the wage freeze and the shift of social contributions towards employees. Therefore the short-term effect of the Pact on public finances is projected to be negative but the-long-term effect positive thanks to the expected improvement in employment. The improved cost competitiveness is also expected to encourage investments.

Implementation of the 2015 pension reform has started in 2017. The lowest statutory retirement age will start to increase gradually and it will be connected to life expectancy in 2027. This is expected to contribute towards higher participation rates for older workers and therefore increased total employment. Against the background of an ageing population and an increase in the economic dependency ratio, which is projected to rise significantly by 2025, this reform should help to improve the sustainability of the pension system.

Both public and private debt has increased marginally. The ratio of gross public debt-to-GDP has risen, but at around 64 % of GDP it is relatively low compared to the euro area as a whole. Households' debt increased in 2016, with credit growth supported by favourable credit conditions, including low interest rates. The growth of non-financial corporations' debt slowed down in 2016, after a rapid increase of intra-group loans in 2015. The financial sector remains well capitalised.

Overall, Finland has made some progress in addressing its 2016 country-specific recommendations. The government has taken political decisions on the reform of the social and healthcare services, and public consultations have been carried out on major parts of the draft legislation. Therefore some progress has been made in addressing the recommendation on fiscal sustainability. In line with the labour market recommendation, the Competitiveness Pact reduces labour costs for employers and extends the possibilities for local level bargaining. A new wage-setting model is being negotiated where wage increases in tradable industries would set an anchor for the wages in non-tradable sectors. The Pact is expected to improve the cost competitiveness of the economy. From 2017, the incentives to accept job offers have been strengthened: the period of entitlement to earnings-related unemployment benefits was cut by a fifth to 400 days and the fees for early childhood education have been reduced, in particular for low-income parents. A new initiative using the social impact bond model has been put in place to better integrate migrants to the labour market. This constitutes some progress towards addressing the labour market recommendation. The government put forward a package which provides new opportunities for the creation and growth of enterprises. Significant reform measures have been proposed in the transport sector and are underway for the gas market, in line with the developments of the Balticconnector pipeline project. These policy initiatives have led to some progress in addressing the competitiveness recommendation.

Regarding progress in reaching the national targets under the Europe 2020 strategy, developments in 2016 were generally positive. Even though the ambitious target will be difficult to meet, the employment rate increased in 2016. The poverty rate is low compared to the EU average but it doubled as a consequence of the two severe recessions. Recently it has not decreased substantially, and the target for poverty reduction seems unattainable. The early school leaving rate declined slightly in 2015 but it could be challenging to meet the target. Finland's tertiary educational attainment rate continued its improving trend in 2015 and is already above the target. Finland continues to be on track to reach its renewable energy and greenhouse gas reduction targets. However, the very ambitious R&D target is likely to be missed, as R&D investment has decreased in recent years.

The main findings of the in-depth review contained in this report, and the related policy challenges, are as follows:

Cost competitiveness is expected to improve on the back of the Competitiveness Pact. The Pact's positive impact on exports and employment is expected to materialise gradually. The discussions on the new wage setting model for the upcoming wage negotiation rounds are still under way and reaching an agreement will be crucial to secure these expected positive effects.

Non-cost competitiveness acts as a drag on export performance. Progress has been made in opening up services sectors such as retail trade to competition, and a number of other domestic service sectors, including taxis, have been identified as candidates for future reform. While international comparisons rank Finland among the leading countries in the world in terms of its business environment and investment appeal, the existing stock of inward investments in Finland is below the EU average when compared to the size of the economy.

Structural change is unfolding, but the reorientation of the economy seems to have slowed down recently. After a decline in IT manufacturing, information and communications technology services have become a more important exporting sector. The recent rapid increase in start-ups is expected to contribute to the gradual diversification of production structures. Policies to support start-ups and the internationalisation of small and medium sized enterprises are in place, and the government has outlined plans to enable and promote entrepreneurship further, including by reducing the administrative and regulatory burden.

Private sector debt is expected to remain high but the financial sector is robust. Non-financial corporations' debt may be reduced in the coming years due to increased profitability resulting from the Competitiveness Pact. The recent policy measures, i.e. phasing out the deductibility of mortgage interest payments in personal income taxation and a loan-to-value cap as of July 2016, are expected to moderate households' borrowing somewhat. That said, households' debt is low compared with Denmark and Sweden, and households are not expected to reduce their debt given the favourable borrowing conditions. Levels of non-performing loans remain low and the banking sector is generally solid.

The public debt-to-GDP ratio has started decelerating and is projected to stand around 66.5 % in 2018. The government has committed itself to consolidating public finances and the deficit is projected to decline in the medium term. According to the government's fiscal strategy, debt should be on a downward trend in 2019. The pension reform implemented from 2017 and the ongoing reform of the healthcare and social services will help reduce the medium-term sustainability risks.

Other key economic issues analysed in this report which point to particular challenges facing Finland's economy are as follows:

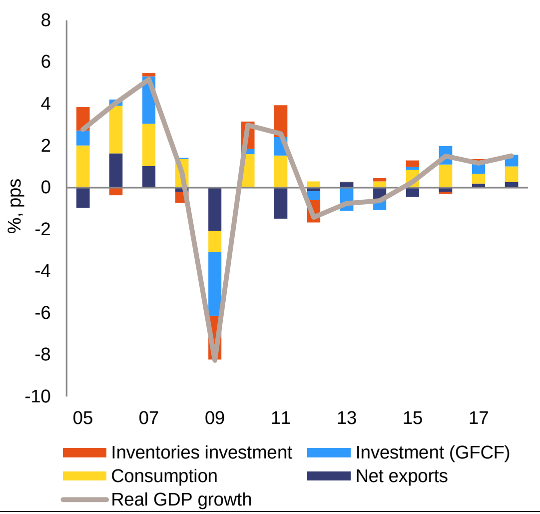
- **The legislation needed to reform the healthcare and social services system has been agreed by the government.** The main aims of the reform include improved access to healthcare and containing cost increases to address the need for fiscal sustainability. Before the legislation is passed, agreement is also needed on the most controversial issues: freedom of choice and the role of private healthcare providers in the new system.
- **The labour market situation has started to improve but some employment and social challenges remain, such as the continued increase in long-term unemployment.** This highlights the need to better target active labour market policies and to continue to invest in life-long learning and vocational training. To achieve a higher employment rate including for migrants is essential to counter the challenges posed by an ageing population. While the activity rate is improving overall, it has declined for the 25-39 age group. The complex benefit system, with its various types of allowances, can result in significant inactivity and low-wage traps.

1. ECONOMIC SITUATION AND OUTLOOK

GDP growth

Following three years of contraction, Finland's economy is growing again. In 2015, the economy grew by 0.3 % and in 2016 the Commission expects growth to have accelerated to about 1.5 % on the back of increased private consumption and investment. The economy is projected to continue to expand by 1.2 % and 1.5 % in 2017 and 2018 respectively. Towards the end of the forecast horizon, GDP growth is expected to become more balanced, with both domestic and external demand supporting growth.

Graph 1.1: **Real GDP growth and growth contributions, 2005-2018, Finland**



Source: European Commission, 2017 Winter Forecast

Potential GDP growth

Potential real GDP growth is not expected to return to pre-crisis growth rates in the medium term. Prior to the crisis, potential GDP grew rapidly especially due to increases in total factor productivity as the economy adjusted towards high productivity industries. However, the economy risks becoming trapped on a low-growth path where:

(i) working age population declines;

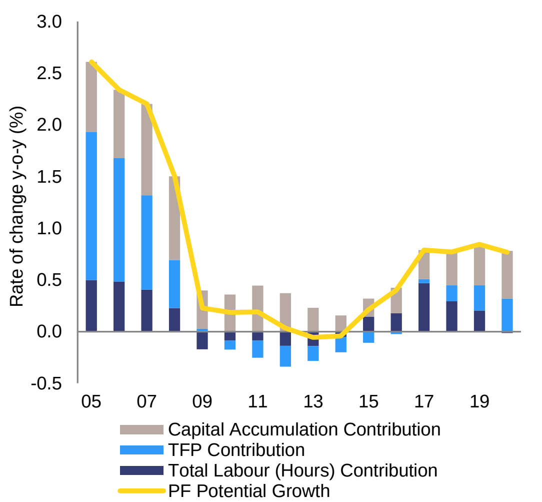
(ii) total factor productivity stagnates;

(iii) investments remain at a low level (in particular the decline in research investment and moderate equipment investment restrain the potential to increase labour productivity; low productivity growth in turn requires continued wage moderation to retain competitiveness); and

(iv) high private and public sector debt acts as a drag on growth.

Measures to support an environment which is conducive to investments, research and innovation, and structural change towards higher-productivity activities could help the economy to move out of the low-growth equilibrium.

Graph 1.2: **Contributions to potential growth**



Source: European Commission, 2017 Winter Forecast

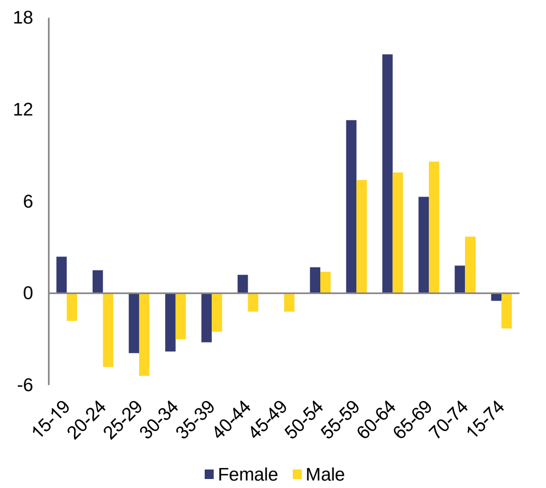
Labour market

The labour market situation started to improve in 2016. The employment rate (15-64) increased to 70.5% by the third quarter of 2016, 0.6 pps higher than in previous year. The unemployment rate peaked at 9.4 % in 2015 and fell to 8.8% in 2016. The latest unemployment rate data (7.9 % in December 2016) show a year-on-year decline of 1.3 pps. Youth unemployment (age group 15-24) also started to decline. It fell by 2.3 pps to 20.1 % in 2016 approaching the EU average of 18.8 %. Long-term unemployment is expected to have peaked at 2.3 % in 2016.

Labour market policies are challenged by the retirement of the 'baby boom' cohorts and the decline in employment in younger age groups. The largest cohort was born in 1947 and reached the lowest statutory retirement age, 63, in 2010. Since then the working age population (15-64) has been shrinking. To preserve the sustainability of the pension system, the earnings-related pension system was reformed in 2005 when the incentives to work longer were strengthened. A new pension reform took effect from 2017, when the lowest statutory retirement age started to gradually increase, from 63 to 65 by2027. Measures to remove early exit pathways have led to higher employment rates of older workers. However, at the same time, employment has fallen among the 20-39 age group. Overall, in 2005-2015, the employment rate of 15-74 year olds declined, especially among men.

The economic dependency ratio ([1]), is at risk to increase in the medium and long term. Population projections and assumptions on employment rates according to the Commission's 2015 Ageing Report lead to a worsening economic dependency ratio from about 120 in the early 2000s to about 135 by 2025. This highlights the need to continue reforms that will increase employment to ensure the sustainability of the social security system.

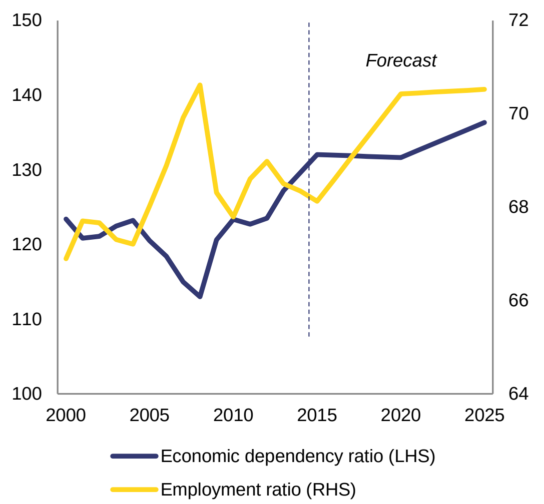
Graph 1.3: **Change in employment rates by age cohorts and gender, 2005-2015**



Source: European Commission

([1]) A ratio of people aged 14 and below, people at 65 and above and people not in employment aged 15-64 and number of employed aged 15-64.

Graph 1.4: **Employment ratio and economic dependency ratio**



Source: European Commission, Statistics Finland

Social developments

Income inequality in Finland is low in comparison to other EU countries. The richest 20 % of the population had 3.6 times the income of the poorest 20 % in 2015, compared with 5.2 times in the whole EU. The Gini coefficient of equivalised disposable income was at 25.2 in 2015, reflecting a more equal income distribution than the EU average (Gini coefficient of 31.0). Income equality, as measured by both indicators, has remained stable in Finland in recent years. Households' net wealth ([2]) however is not as evenly distributed as income, but remains within the range observed in other EU countries for which data were collected in 2013-2014 (ECB 2016).

The risk of poverty has declined gradually since its peak in 2011. In 2015, the at-risk-of-poverty rate after social transfers/pensions, at 12.4 %, was about 4 pps. lower than the EU average. However, the recent economic downturn led to an increase in the number of long-term unemployed, and in the number of 15-24 year-olds who do not study, work or participate in (vocational) training. This is likely to limit the scope for significant further improvements in income equality and in the fight against poverty in the near future. It is also worth recalling that the legacy of the 1990s recession, a considerable increase in the risk of poverty,

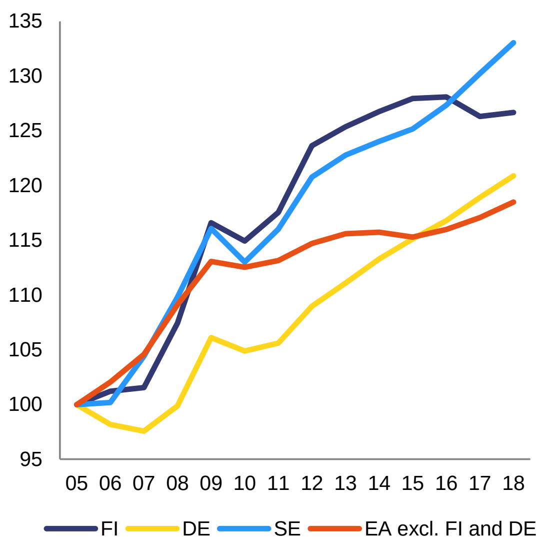
([2]) Difference between total assets and total liabilities.

remained uncorrected despite the economic upturns that followed. The government's EU2020 target, no more than 770 000 persons at risk of poverty or social exclusion, seems unlikely to be reached. In 2015, the corresponding number was at 904 000, with only a marginal (7 000) decrease since 2008.

Competitiveness

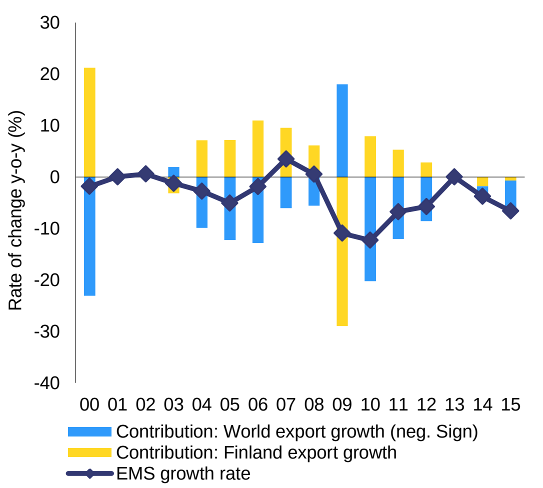
Competitiveness losses are expected to start reversing gradually over the medium run. Cost competitiveness compared to peer countries has been improving already over recent years and will improve further in 2017 given the recent labour market agreement, the Competitiveness Pact (see box 1.1 and graph 1.5). Exports are projected to turn to growth as of 2017, and in 2018 the contribution of net exports to GDP growth is expected to be positive again. Although the outlook for exports has improved, uncertainty related to the external environment remains significant, in particular with regard to demand from the EU and the speed of the economic recovery in Russia in 2017-2018. Also the challenges related to non-cost competitiveness, such as the low productivity growth, the small number of exporting SMEs and the concentration of export products in intermediate and investment goods, remain. The current account deficit has been contracting since 2012, when the deficit was 1.9 % of GDP, reaching about 0.4 % of GDP in 2015.

Graph 1.5: **Nominal unit labour costs, 2005=100**



Source: European Commission, 2017 Winter Forecast

Graph 1.6: **Export market shares**

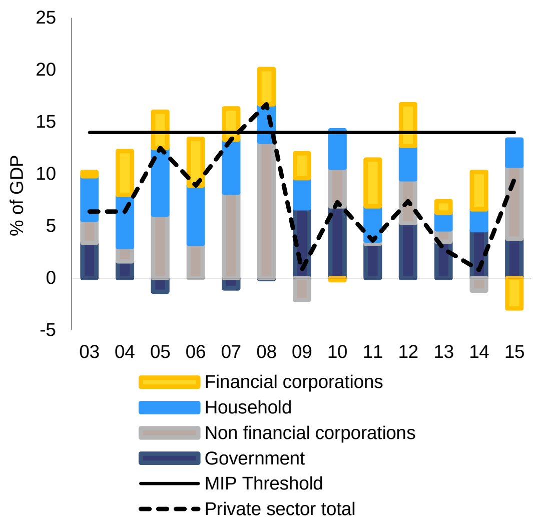


Source: European Commission

Financial sector

High private sector debt entails vulnerabilities but the financial sector remains stable and strong. The private sector debt-to-GDP ratio has remained on an increasing trend, and in 2015 jumped to about 156 % of GDP mainly due to the increase in the foreign borrowing of non-financial corporations. Households' debt-to-gross disposable income increased to 112 % which is an all-time high for Finland and above the euro area average of about 94 %. At same time it remained below the corresponding ratios for Sweden (166 %) and Denmark (256 %). However, households and non-financial corporations have benefited from low interest rates and service their debt well, as indicated by the low amount of non-performing loans. The banking sector is highly concentrated, the banks are interconnected in the Nordic countries and are dependent on wholesale financing. Most of the household debt consists of mortgage loans which use the apartment or house as a collateral. This link between the housing market and the banking sector may be somewhat stronger in Finland than in other countries, as the share of owner-occupied housing is higher than in the euro area overall.

Graph 1.7: **Decomposition of growth of debt**

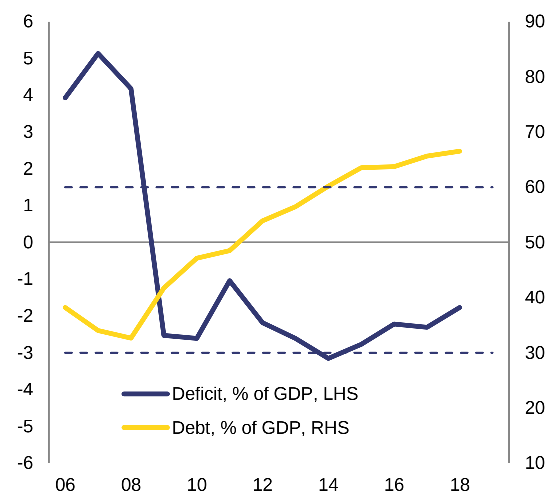


Source: European Commission

Public finances

The balancing of government revenue and expenditure continues gradually. The budget deficit amounted to 2.8 % of GDP in 2015 and is expected to have declined to 2.2 % of GDP in 2016, as a result of expenditure cuts and revenue measures such as the increase in unemployment insurance contributions. These measures were decided in the general government fiscal plan for 2016-19. In 2017, in line with the Competitiveness Pact, personal income tax and employers' health insurance contributions were lowered. These measures lead to an estimated revenue loss of 0.6 % of GDP. The overall deficit is projected to worsen to 2.3 % of GDP in 2017 despite the implementation of expenditure cuts in line with the fiscal plan and the reduction of public sector employees' holiday bonuses. In 2018, the deficit is expected to fall again to 1.8 % of GDP thanks to increasing economic activity and expenditure cuts foreseen in the fiscal plan.

Graph 1.8: **Public deficit and debt, % of GDP**



Source: European Commission, 2017 Winter Forecast

Box 1.1: **Selected highlights: the Competitiveness Pact**

Several analysts (among others Borg and Vartiainen (2015), European Commission (2014), Kajanoja (2012)) pointed to deteriorated cost competitiveness as one of the possible sources of weak economic developments before the parliamentary elections in 2015. The Sipilä government took office in May 2015 and set itself the target to improve Finland's cost-competitiveness by 15% in terms of nominal unit labour costs. Of this, 5pps would be reached through structural reforms leading to higher productivity, 5pps through continuing wage moderation and 5pps through an agreement between the social partners.

The central labour market organisations reached an agreement on the Competitiveness Pact (the Pact) in February 2016. During the spring and early summer, employer and employee organisations carried out industry level collective agreement negotiations to introduce the Pact into about 300 industry- or company-level agreements. To enable the conclusion of the industry-level agreements, the government announced in early June that it will cut taxes on labour income in all income categories as of 2017 depending on the coverage of the Pact. By the time of the government budget negotiations in late summer, over 90% of employees were covered by the Pact. Consequently, a 515 million euros tax cut was included in the government’s 2017 budget proposal.

The Pact includes the following measures to reduce labour costs:

– annual working time will be increased by 24 hours without additional compensation from 2017

– after the expiry of the latest wage agreements (mainly in late 2016 or early 2017), wages will be frozen for 12 months (the exact timing depends on the industry)

– a larger share of social security contributions will be shifted permanently towards the employees.

In line with the Pact, public sector employees' annual holiday bonuses, which roughly correspond to 50% of a month's salary, will be temporarily (2017-2019) reduced by 30%, lowering public spending. The savings that are expected to materialise as a result of the Pact will be used to reduce employers' labour costs. Over the long-run, the Pact is expected to have positive impacts on exports, real GDP, employment and public finances. Estimates of the impact of lower wage costs on employment range from 20 000 to 40 000 depending on the method and assumptions used (see for example estimates by Ministry of Finance (2016), Lehto (2016), Economic Policy Council (2016)).

The social partners also agreed to extend local bargaining possibilities, and the Pact negotiations are being followed up by negotiations for a new collective wage setting practices, which would emphasise the role of tradable industries' cost-competitiveness (see Section 4.3). Wage increases that will be negotiated after the wage freeze period will be the key in preserving the gains of the Competitiveness Pact.

Table 1.1: Key economic, financial and social indicators - Finland

	2004-2008	2009	2010	2011	2012	2013	2014	2015	forecast 2016	2017	2018
Real GDP (y-o-y)	3.3	-8.3	3.0	2.6	-1.4	-0.8	-0.6	0.3	1.5	1.2	1.5
Private consumption (y-o-y)	3.3	-2.7	3.1	2.9	0.3	-0.5	0.8	1.5	2.0	1.2	1.3
Public consumption (y-o-y)	1.5	1.6	-0.1	-0.1	0.5	1.1	-0.5	0.1	-0.1	-0.8	0.1
Gross fixed capital formation (y-o-y)	3.9	-12.5	1.1	4.1	-1.9	-4.9	-2.6	1.1	3.4	2.0	2.5
Exports of goods and services (y-o-y)	8.3	-20.1	6.2	2.0	1.2	1.1	-2.7	2.0	0.8	2.0	3.3
Imports of goods and services (y-o-y)	8.3	-16.9	6.5	6.0	1.6	0.5	-1.3	3.1	1.3	1.5	2.5
Output gap	1.9	-5.1	-2.4	-0.1	-1.6	-2.3	-2.9	-2.8	-1.7	-1.3	-0.6
Potential growth (y-o-y)	2.3	0.2	0.2	0.2	0.0	-0.1	0.0	0.2	0.4	0.8	0.8
Contribution to GDP growth:											
Domestic demand (y-o-y)	2.8	-4.1	1.8	2.4	-0.1	-1.1	-0.3	1.1	1.8	0.9	1.3
Inventories (y-o-y)	0.1	-2.1	1.3	1.5	-1.1	0.0	0.2	0.3	-0.1	0.1	0.0
Net exports (y-o-y)	0.4	-2.1	0.0	-1.5	-0.2	0.3	-0.5	-0.4	-0.2	0.2	0.3
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.4	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.2	0.5	0.3
Capital accumulation (y-o-y)	0.7	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.3
Total factor productivity (y-o-y)	1.1	0.0	-0.1	-0.2	-0.2	-0.1	-0.2	-0.1	0.0	0.0	0.2
Current account balance (% of GDP), balance of payments	3.7	1.9	1.2	-1.8	-1.9	-1.6	-1.1	-0.4	.	.	.
Trade balance (% of GDP), balance of payments	4.7	2.3	1.4	-0.9	-1.1	-0.5	-0.5	0.1	.	.	.
Terms of trade of goods and services (y-o-y)	-2.1	1.3	-2.1	-1.6	-1.0	0.7	1.3	2.8	0.6	-1.1	-0.8
Capital account balance (% of GDP)	0.1	0.0*	0.0*	0.0*	0.0*	0.0*	.	.	.	.	.
Net international investment position (% of GDP)	-14.0	3.2	16.5	15.1	11.7	3.9	-2.6	0.6	.	.	.
Net marketable external debt (% of GDP)1	-1.0	-11.7*	-16.4*	-20.9*	-31.0*	-37.1	-39.8	-29.5	.	.	.
Gross marketable external debt (% of GDP)1	98.1	138.5	161.1	190.1	204.5	188.5	196.4	181.7	.	.	.
Export performance vs. advanced countries (% change over 5 years)	4.4	-5.6	-12.9	-16.7	-23.1	-24.6	-19.5	-18.80	.	.	.
Export market share, goods and services (y-o-y)	-0.8	-10.8	-12.0	-6.4	-5.8	0.1	-3.6	-6.6	.	.	.
Net FDI flows (% of GDP)	-0.4	2.0	1.1	0.9	1.3	-0.8	-6.3	-7.5	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	0.6	3.4	3.2	1.3	0.7	1.5	-0.1	-0.7	.	.	.
Private credit flow (consolidated, % of GDP)	11.6	0.8	7.3	3.6	7.4	2.8	1.2	9.5	.	.	.
Private sector debt, consolidated (% of GDP)	119.8	142.8	148.9	145.3	148.6	147.7	147.5	155.8	.	.	.
of which household debt, consolidated (% of GDP)	48.4	59.3	61.1	61.3	63.6	64.0	65.5	66.8	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	71.4	83.5	87.8	84.0	85.0	83.7	82.0	89.0	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	3.4	4.9	5.2	1.8	2.7	2.3	3.8	4.0	3.4	3.8	3.9
Corporations, gross operating surplus (% of GDP)	27.3	23.1	23.9	23.2	21.6	21.4	21.9	22.3	22.6	23.8	24.3
Households, net lending (+) or net borrowing (-) (% of GDP)	-2.9	-0.2	-1.0	-2.1	-2.3	-1.5	-1.9	-2.0	-2.1	-2.3	-2.7
Deflated house price index (y-o-y)	4.4	-0.4	4.8	0.0	-0.4	-1.3	-1.8	-0.4	.	.	.
Residential investment (% of GDP)	6.3	5.2	6.1	6.3	6.3	6.0	5.5	5.6	.	.	.
GDP deflator (y-o-y)	1.7	1.9	0.4	2.6	3.0	2.6	1.7	1.7	0.9	1.0	0.9
Harmonised index of consumer prices (HICP, y-o-y)	1.5	1.6	1.7	3.3	3.2	2.2	1.2	-0.2	0.4	1.5	1.2
Nominal compensation per employee (y-o-y)	3.6	2.0	2.2	3.6	2.8	1.3	1.0	1.6	1.2	-0.8	1.2
Labour productivity (real, person employed, y-o-y)	1.6	-6.0	3.7	1.3	-2.3	0.0	-0.2	0.6	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	2.0	8.5	-1.4	2.3	5.2	1.4	1.1	1.0	0.1	-1.4	0.3
Real unit labour costs (y-o-y)	0.3	6.5	-1.8	-0.3	2.2	-1.1	-0.6	-0.7	-0.8	-2.3	-0.6
Real effective exchange rate (ULC, y-o-y)	0.8	6.3	-4.8	0.9	0.2	3.2	1.3	-2.9	-0.6	-2.7	-1.6
Real effective exchange rate (HICP, y-o-y)	-0.8	3.2	-5.7	-0.1	-2.6	2.9	2.4	-2.9	1.2	-2.6	.
Tax wedge on labour for a single person earning the average wage (%)	30.8	29.1	29.1	29.8	29.5	30.1	30.7	30.9	.	.	.
Taxe wedge on labour for a single person earning 50% of the average wage (%)	20.0*	18.3	18.3	18.9	17.9	18.9	19.2	19.4	.	.	.
Total Financial Sector Liabilities, non-consolidated (y-o-y)	14.0	8.3	17.7	26.1	-2.7	-8.5	9.2	-1.5	.	.	.
Tier 1 ratio (%)2	.	13.4	13.5	14.7	14.8	15.3	16.2	20.4	.	.	.
Return on equity (%)3	.	6.2	6.3	6.1	6.5	8.0	9.5	8.5	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	1.1	0.9	0.8	0.8	0.7	1.4	1.3	.	.	.
Unemployment rate	7.6	8.2	8.4	7.8	7.7	8.2	8.7	9.4	8.8	8.6	8.3
Long-term unemployment rate (% of active population)	1.8	1.4	2.0	1.7	1.6	1.7	1.9	2.3	.	.	.
Youth unemployment rate (% of active population in the same age group)	18.5	21.5	21.4	20.1	19.0	19.9	20.5	22.4	20.1	.	.
Activity rate (15-64 year-olds)	75.5	75.0	74.5	74.9	75.2	75.2	75.4	75.8	.	.	.
People at-risk poverty or social exclusion (% total population)	17.3	16.9	16.9	17.9	17.2	16.0	17.3	16.8	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	9.0	8.4	9.3	10.0	9.3	9.0	10.0	10.8	.	.	.
General government balance (% of GDP)	3.6	-2.5	-2.6	-1.0	-2.2	-2.6	-3.2	-2.7	-2.2	-2.3	-1.8
Tax-to-GDP ratio (%)	41.9	41.1	40.9	42.2	42.8	43.7	43.9	44.1	44.2	43.6	43.7
Structural budget balance (% of GDP)	.	.	-1.1	-0.9	-1.2	-1.2	-1.6	-1.1	-1.2	-1.5	-1.4
General government gross debt (% of GDP)	37.5	41.7	47.1	48.5	53.9	56.5	60.2	63.5	63.7	65.6	66.5

(1) Sum of portfolio debt instruments, other investment and reserve assets.
(2,3) Domestic banking groups and stand-alone banks.
(4) Domestic banking groups and stand-alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches.
(*) Indicates BPM5 and/or ESA95.
Source: European Commission, European Central Bank

2. PROGRESS WITH THE COUNTRY-SPECIFIC RECOMMENDATIONS

Progress with the implementation of the recommendations addressed to Finland in 2016 ([3]) has to be seen in a longer term perspective since the introduction of the European Semester in 2011. Over this six year period, the recommendations have focused on public finances, fiscal sustainability, labour market and business environment. Numerous reforms have been undertaken in these areas.

Finland has remained broadly compliant with the fiscal recommendations. The medium-term objective has not been met during most of the period, but over 2011-2015 Finland has made progress towards it in a manner which is broadly compliant with the requirements of the Stability and Growth Pact. However, Finland's debt-to-GDP ratio has risen above 60% and continues to increase.

To address the recommendations in the area of fiscal sustainability, an important pension reform was adopted in 2015, a reform of healthcare and social services is in preparation. The pension reform will gradually increase the minimum retirement age and eventually link it to the life expectancy. This is expected to increase the supply of labour while ensuring that the pensions can be kept at an adequate level. In addition, the government is preparing reforms on the administrative structure of the municipalities and on the provision of healthcare and social services.

There has also been progress in labour market reforms. Active labour market policies aiming to increase the participation rate have been implemented. To improve competitiveness, social partners have agreed on very moderate wage increases and in 2016 a Competitiveness Pact was concluded to improve cost competitiveness by reducing labour costs to employers. The financial incentives to accept low-income or part-time jobs have been improved, as since the beginning of 2014 it has been possible to receive employment-related earnings for up to 300 euros per month without any impact on the unemployment benefit. Similarly, since 2015, the housing allowance has included a protected part of 300 euros, which has not been deducted when the person receiving assistance has received revenue from work.

The government has also addressed the recommendations regarding the competition in services, in particular in retail. Regulation of the retail sector has been eased. As a major step, shop opening hours were liberalised in 2016. The land use and building act has been modified so that promoting competition was added to the objectives of land use planning so as to take into account the need to increase competition. Alcohol monopoly stores have been opening next to establishments other than the dominant retail chains.

Regarding 2016, Finland has, overall, made some ([4]) progress in addressing its 2016 country-specific recommendations (CSRs). The government has presented large parts of the draft legislation on the reform of the social and healthcare services. The social partners have signed a Competitiveness Pact which reduces labour costs for employers and extends the possibilities for local bargaining and a new wage setting model is being negotiated. To increase the incentives to accept job offers, the obligation for the unemployed to accept a job offer as well as the obligation to participate in activation schemes have been tightened. In addition, the duration of earnings-related unemployment benefits was reduced. In order to promote entrepreneurship, the government put forward a package which provides additional opportunities for company creation and growth. Initiatives to ease the establishment conditions for retail outlets have been launched. De-regulation measures have been proposed for the transport sector and are underway for gas markets.

([3]) For the assessment of other reforms implemented in the past, see in particular section 4.

([4]) Information on the level of progress and actions taken to address the policy advice in each respective subpart of a CSR is presented in the Overview Table in the Annex. This overall assessment does not include an assessment of compliance with the Stability and Growth Pact.

Table 2.1: **Summary table on 2016 CSR assessment**

Finland	**Overall assessment of progress with 2016 CSRs: Some**
CSR 1: *Achieve an annual fiscal adjustment of at least 0,5 % of GDP towards the medium-term budgetary objective in 2016 and 0,6 % in 2017. Use any windfall gains to accelerate the reduction of the general government debt ratio. Ensure timely adoption and implementation of the administrative reform with a view to better cost-effectiveness of social and healthcare services.*	**Some progress** in ensuring timely adoption and implementation of the administrative reform*
CSR 2: *While respecting the role of social partners, ensure that the wage setting system enhances local wage bargaining and removes rigidities, contributing to competitiveness and a more export industry-led approach. Increase incentives to accept work and ensure targeted and sufficient active labour market measures, including for people with a migrant background. Take measures to reduce regional and skills mismatches. (MIP relevant)*	**Some progress** • Substantial progress in ensuring that the wage setting system enhances local wage bargaining, removes rigidities and contributes to competitiveness • Some progress in increasing incentives to work • Some progress in ensuring targeted and sufficient active labour market measures, including for people with a migrant background • Some progress in addressing regional and skills mismatches
CSR 3: *Continue pursuing efforts to increase competition in services, including in retail. Promote entrepreneurship and investment, including by reducing administrative and regulatory burden, to foster growth of high value added production. (MIP relevant)*	**Some progress** • Some progress in increasing competition in services • Some progress in promoting entrepreneurship and investment

* This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact.
Source: European Commission

Box 2.1: **Contribution of the EU budget to structural change in Finland**

The total allocation of the European Structural and Investment Funds (ESI Funds) in Finland amounts to EUR 3.8 billion under the current financial framework 2014-2020. This is equivalent to around 0.3 % of GDP annually (over 2014-2017) and 5 % of national public investment[1]. By 31 December 2016, an estimated EUR 1.8 billion, which represents about 49 % of the total allocation for ESI Funds, have already been allocated to concrete projects.

Financing under the European Fund for Strategic Investments, Horizon 2020, the Connecting Europe Facility (CEF) and other directly managed EU funds is additional to the ESI Funds. By end 2016, Finland has signed agreements for EUR 107.9 million for projects under the Connecting Europe Facility. The EIB Group approved financing under EFSI amounts to EUR 923 million, which is expected to trigger nearly EUR 2.8 billion in total investments (as of end 2016)..

All necessary reforms and strategies as required by the ex-ante conditionalities[2] to ensure a timely and efficient up-take of the funds have been met thus ensuring a timely and efficient up-take of the funds.

All relevant CSRs were taken into account when designing the 2014-2020 programmes. The ESI Funds support the competitiveness, boost research and innovation, create employment as well as facilitate education and training. ESI Funds address, for example, labour market access for young people, older workers as well as long-term unemployed, migrants and other vulnerable groups through different operations. For example implementation of the youth guarantee is partly funded by the ESI Funds through one-stop guidance centres. By December 2016, more than 9 000 young unemployed or outside of working life had been supported by measures financed by the ESF. In the area of research and innovation, ESI Funds support Finland in implementing its smart specialisation strategies. In all 19 regions over 1 000 enterprises are involved and will cooperate with research institutes in their areas of excellence.

https://cohesiondata.ec.europa.eu/countries/FI

[1] National public investment is defined as gross capital formation + investment grants + national expenditure on agriculture and fisheries

[2] At the adoption of programmes, Member States are required to comply with a number of ex-ante conditionalities, which aim at improving framework and investment conditions for the majority of areas of public investments. For Members States that do not fulfil all the ex-ante conditionalities by the end 2016, the Commission has the possibility to propose the temporary suspension of all or part of interim payments

3. SUMMARY OF THE MAIN FINDINGS FROM THE MIP IN-DEPTH REVIEW

The 2017 Alert Mechanism Report called for further in-depth analysis to monitor Finland's progress in the evolution of the imbalances identified in the 2016 MIP cycle. The selection was motivated by the continued challenges related to both price and non-price competitiveness in a context of sectoral restructuring. Furthermore, private and public sector indebtedness is high which could constitute a risk to the stability in the economy.

The report provides the in-depth review of how the imbalances identified have developed. The analysis is found in particular under competitiveness and structural change (Section 4.4.1), private sector debt (Section 4.2) and public debt (Section 4.1.1).

3.1. IMBALANCES AND THEIR GRAVITY

Export market shares fell in 2015 mainly due to weak performance in the trade of goods. The cumulative loss of export market shares in 2011-2015 is estimated at about 20 %, which is one of the largest in the EU. The decline has been driven by cumulative losses of competitiveness and the ongoing structural change in the economy and the sensitivity of exports to the weak Russian economy. Moreover, Finnish exports focus on intermediate and investment goods, which make it vulnerable to economic swings when investments decline.

Structural change in industry has slowed down. The rapid downsizing of forest and electronics industries is over, but no other industry has emerged as clearly taking the leading role in economic recovery. Manufacturing has lost about one fifth of its jobs and close to one third of its gross value added since the crisis. Consequently, aggregate labour productivity has fallen.

Private sector debt remains high, at about 155 % of GDP in 2015. The households' debt-to-GDP ratio stood at 67 % while non-financial corporations' debt was about 89 %. Non-financial corporations' debt increased in 2015 partly due to loan arrangements between domestic parent companies and their daughter companies abroad.

Households' debt has increased to 112 % of their gross disposable income. The European Systemic Risk Board issued a formal warning to Finland in 2016, highlighting the high level of indebtedness and the associated vulnerabilities. At the same time, as most mortgage loans are tied to market reference interest rates, households' average interest rate expenditure has fallen to a record low 0.4 % of gross disposable income. The share of non-performing loans in the total loan stock, at 1.2 % in mid-2016, is the lowest in the EU. The elevated private indebtedness, especially households' debt, could reduce the economy's resilience to macroeconomic shocks.

Public debt has increased since the beginning of the crisis and is now above the 60 % of GDP Treaty reference value but is set to stabilise at a level below 70 %.

The financial sector is well capitalised and shielded against risks even if vulnerabilities such as high concentration, dependency on wholesale market funding and cross-border connections to the Nordic and Baltic banking sector, remain (see also country reports for Sweden 2016 and 2017).

The solid position of the banking sector reduces macro stability risks from private sector debt. Furthermore, in a Nordic context, Finnish households' debt-to-income ratio is not extremely high and given fixed monthly mortgage payments most households are protected from future normalisation of reference market interest rates for mortgages.

3.2. EVOLUTION, PROSPECTS, AND POLICY RESPONSES

Finland is expected to continue losing export market shares as the outlook in the manufacturing sector remains relatively weak. 2016 is expected to have been a turning point in exports and manufacturing sector production.

The cumulated loss of competitiveness has been partly addressed. Cost competitiveness is expected to improve in 2017 due to the Competitiveness Pact, but the lack of agreement on wage setting practices from 2018 create uncertainty about future developments. If the new wage setting practices or so called *Finnish model* is successful, it will deliver nominal wage increases that take into account competitiveness and productivity developments so that workers purchasing power is guaranteed while exporting companies thrive. With enhanced local possibilities to apply the sector level agreements, as agreed in the Competitiveness Pact (for organised employers) employers have more room to adjust to economically difficult times. Non-cost competitiveness challenges, including slow productivity growth, continue to hamper economic performance and export growth, but lively start-up activities should imply that the fundamentals for doing business are broadly in a good shape.

Non-cost competitiveness acts as a drag on export performance. Many features of the economy, such as the skilled labour force or the favourable and stable business environment, should make Finland well placed to reap the benefits of world growth. However, this does not yet seem to be the case. That said, the rapid emergence of start-up companies might pave the way to more diversified exports. And Russia's expected economic recovery from 2017 could bring about a positive risk to Finland's economic outlook in the coming years.

Structural change is unfolding, but the reorientation of the economy might have slowed down recently. After a decline in electronics production, ICT services have become more important in service exports. The government continues to support start-ups through its growth programmes. Policies to support start-ups and the internationalisation of SMEs are in place, but might not be able to bring about a rapid change in the structure of the economy or export market shares in the short run.

Private sector debt is expected to remain high but stable. Non-financial corporations may reduce debt in the coming years for example due to increased profitability thanks to the Competitiveness Pact. The recent policy measures, i.e. phasing out the deductibility of mortgage interest payments in personal income taxation and a loan-to-value cap as of July 2016, will have a curbing effect on households' borrowing. Despite this, households are not expected to deleverage given the favourable borrowing conditions. The households' debt-to-disposable income ratio could continue to rise as income growth is projected to remain limited given the wage freeze under the Competitiveness Pact.

Public sector debt is expected to increase further, driven up by the costs of an ageing population**.** The Finnish government is committed to consolidating public finances as outlined in the government programme of 2015. According to the government's fiscal strategy, debt would be put on a downward trend in 2019. The 2017 pension reform and the ongoing reform of healthcare and social services will help reduce the medium-term sustainability risk.

3.3. OVERALL ASSESSMENT

Sources of imbalances identified in Finland are linked to competitiveness losses in a context of sectoral restructuring and relatively high private sector debt. Competitiveness losses are the result of major sector restructuring affecting the growth potential and are reflected in protracted market share losses. Government debt has been growing since after the crisis.

These developments had however limited macro-stability implications because of the strength of the financial sector. High levels of private debt did not lead to a deterioration of banks' balance sheets and the share of non-performing loans remains very limited.

The post-crisis potential growth slowdown is likely to be partly persistent but signs of recovery are present. Potential growth has fallen post-crisis and is not expected to return to pre-crisis growth rates in the medium term as growth of labour productivity is expected to remain subdued. Losses in export market shares and costs competitiveness have decelerated. Private debt as a share of GDP is rising but a slower rate, both for non-financial corporations and households. Government debt is expected to grow at a decelerated pace over the 2016-2018 period and to be stabilised afterwards.

Table 3.1: **MIP Assessment Matrix (*) Finland 2017**

	Gravity of the challenge	Evolution and prospects	Policy responses
		Imbalances	
Competitiveness	The loss of competitiveness has led to a loss in Finland's export market shares, which fell by 6.6% in 2015. The cumulative loss of export market shares in the five years to 2015 was 20.5% while market shares had declined significantly already before then. This contributed to negative or modest GDP growth and job losses.	In 2015 the market share loss accelerated as real goods exports fell by 2.2% but in 2016 exports are expected to have grown again. From 2017, improved cost competitiveness is expected to support export growth.	The Competitiveness Pact includes measures that are expected to lower wage costs by 4%. Social partners signed the Pact in summer 2016 and it comes into effect as of 2017.
	The change in nominal unit labour costs over the past three years was 3.6% cumulatively. Since 2005 Finland's nominal unit labour costs have increased cumulatively by about 28% while in euro area, unit labour costs increased on average by about 16%.	In 2015 nominal unit labour costs increased only by 1% and they are expected to increase by 0.6% this year. In 2017 unit labour costs are expected to fall by 1.2% in accordance with the Competitiveness Pact.	In 2017, negotiated wages will be frozen and annual working time increases by 24 hours without compensation.
	High productivity sectors have declined and the share of low-productivity services in the economy continues to increase, leading to negative or low aggregate productivity growth.		The government's entrepreneur package include a subsidy for one-person companies to hire a worker, a reform in unemployment insurance to make it more conducive to becoming an entrepreneur, a review of measures that guide the recruitment of foreign specialists and the creation of public database of inventions that everyone can access and exploit.
	The manufacturing industries have lost about 87000 jobs or 21% since 2008; in 2015 real value added was about 30% below 2008 level. Paper and electronics account for bulk of the losses of value added, but also other technology industries have reduced staff and production.	Over the recent years, the decline in manufacturing has slowed down and is expected to have bottomed out in 2016. The outlook for 2017 looks positive but tepid.	The Innovation vouncher was launched in 2016 to promote innovation and product development among SMEs.
Private and public sector debt	Private sector debt amounted to 155.7% of GDP in 2015.	In early 2016 the NFC turned into passive deleveraging mode while increase in the debt-to-GDP ratio has recently slowed down. Overall, the private sector debt ratio is expected to have stabilised in 2016.	In 2016 FIN-FSA introduced a maximum loan-to-value ratio of 90% for housing loans (95% for first time buyers).

(Continued on the next page)

The government has shown determination to restore the competitiveness of the economy. Following a strong push from the government, social partners agreed on measures to improve cost competitiveness especially on the front of labour costs and to enhance the resilience of firms through more flexible wage setting practices. Measures have been taken also to contain the incentives for taking up excessive mortgage debt.

Table (continued)

	Households' debt-to-gross disposable income was 112.3% in 2015. Households' debt-to-GDP ratio was 66.9% and households' net-financial asset position was 72% of GDP in 2015.	Nominal house prices, the main driver for households' debt, have been rather flat over the recent years. In real terms, house prices have been gradually declining. Increasing activity in construction and the latest house price data point to gradually increasing nominal prices in the short-run. However, house prices in the capital city region are significantly higher than in the rest of the country and have also continued to increase.	A 10% minimum level for the average risk weight on housing loans will be introduced on July 2017 at the latest for banks that have adopted the Internal Ratings Based Approach.
	Given fixed monthly mortgage payments, most households are protected from future normalisation of reference market interest rates for mortgages.		
	The Finnish banking system has remained well capitalised and fairly profitable despite the overall weakness, and the share of non-performing loans is among the lowest in the EU.		
	Non-financial corporations' (non-consolidated) debt was about 116% of GDP and their net financial asset position stood at -128.9% in 2015.	Non-financial corporations increased their foreign lending in 2015 but a notable part of the increased debt consisted of intra-group loans.	
	Public debt was 63.5% of GDP in 2015.	The debt has increased since 2008 and is expected to rise to 66.5% of GDP by 2018.	The government programme outlines consolidation measures for 2016-2019 and has a target of putting the government debt-to-GDP ratio on a downward path as of 2019.

Conclusions from IDR analysis
● Finland has experienced competitiveness losses in a context of sectoral restructuring and increasing debt in the private sector. Government debt has also increased, though remaining below euro-area average. Growth remains weak in a context of subdued export demand. Despite high private debt, the financial sector is well capitalised and the level of NPLs among the lowest in the EU.
● Losses in export market shares and costs competitiveness have decelerated. Private debt as a share of GDP is rising but a slower rate, both for non-financial corporations and households. Government debt is expected to continue to increase over the 2016-2018 period at a slowing pace on the back of improving budgetary figures.
● Following a strong push from the government, social partners agreed on measures to improve cost competitiveness especially on the front of labour costs and to enhance the resilience of firms through more flexible wage setting practices. Measures have been taken also to contain the incentives for taking up excessive mortgage debt.

(*) The first column summarises "gravity" issues which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the "evolution and prospects" of imbalances. The third column reports recent and planned relevant measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges, in terms of their gravity, developments and prospects, policy response.
Source: European Commission

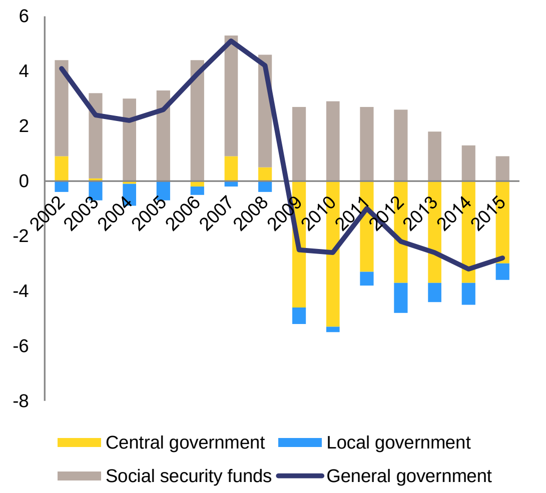
4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. FISCAL POLICY* ([5])

Finland's public debt has increased from about 30% in 2007 to above 60% in 2016. Policy makers have faced the difficult task of striking a balance between the need to respect the fiscal rules and the need to support economic growth during the years of recession or very low growth. In this period, the medium-term budgetary objective was mostly not met. Instead, the country cushioned the rapid fall in revenues by borrowing (Graph 4.1.1). The Commission forecasts the debt-to-GDP ratio to increase also in 2016-2018.

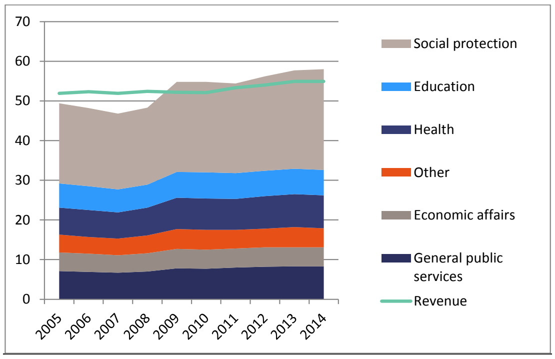
Graph 4.1.1: **General government deficit 2002-2015, % of GDP**



Source: National Accounts

Public debt has increased due to relatively high primary deficits and because the pension funds that have budgetary surplus do not invest into government debt. Primary deficits have resulted from a fall in government revenues after the crises while expenditures kept growing, driven by social protection and healthcare. The stock-flow adjustment is driven by the fact that the statutory earnings-related pension system within the general government sector is partially pre-funded and in surplus. The surplus of the statutory earnings-related pension system was 1.3 % of GDP in 2015. . According to the OECD statistics ([6]), Finland's general government net financial assets are expected to amount to 52.0 % of GDP in 2016, second highest among the OECD countries (most countries have large net liabilities).

Graph 4.1.2: **General government expenditure by function and revenue (% of GDP)**



Source: Statistics Finland

Risks to the development of the gross debt ratio stem mainly from the macroeconomic developments, low real and nominal growth. Risks related to various guarantees issued by the government seem contained as these are related to a large number of diverse companies and not concentrated to particular companies or sectors.

4.1.2. LONG-TERM SUSTAINABILITY

Fiscal sustainability analysis points to a high sustainability challenge over the medium term. Based on the Debt Sustainability Monitor, Finland does not appear to face risks of fiscal stress over the short term (within one year). Over the long-term, it can be classified as a medium risk country (European Commission 2017). The medium-term risk is however high, because under the baseline scenario, structural primary balance should improve by 2.1 pps over 5 (post-forecast) years to reach a 60 % public debt-to-GDP ratio by 2031. This rather high adjustment requirement takes into account the current debt level and the required financing for additional expenditure arising from

([5]) An asterisk indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings).

([6]) Statistical annex of the OECD Economic Outlook (June 2016) an ageing population. The debt sustainability analysis shows that the debt ratio would be still increasing at the end of the 10-year projection period under all sensitivity test scenarios. The probability of debt ratio being higher in 2021 than in 2016 is 80 %.

The existing sustainability challenges are well recognised by policymakers and measures to address them have been adopted or are being discussed. From January 2017, a pension reform will enter into force. The earliest pensionable age will increase from the current 63 years by 3 months for each age cohort, until it reaches 65 years in 2027. Thereafter the link with life expectancy will be introduced, so that the time spent working in relation to the time spent in retirement will be fixed at the 2025 level. The national authorities project that the pension reform will have a positive annual growth impact of 0.1 % on GDP from 2020 onwards, as the supply of labour increases. The direct fiscal effect on the primary balance is projected to be -0.1 % in 2017 (due to the lowering of pension contributions). However the total positive impact upon primary balance is expected to reach 0.6 % by 2030. It is estimated by the national authorities that the reform will lower the S2 sustainability indicator by 1pp.

The reform of social and health services is expected to increase the sustainability of the health and social system. Pressure on costs arises from the ageing population. The main objective of the reform is to secure the delivery and adequate access to health and social services while keeping cost increases under control. Although the reform will not provide immediate savings, it has the potential to curb the speed of expenditure increases (currently health care expenditure grows at 2.4 % in real terms per year and the reform would reduce the growth to 0.9 %). All responsibility for health and social will shift from the municipalities to 18 counties from 1 January 2019. The first batch of draft bills went through public consultation in autumn 2016. The draft legislation to regulate the freedom of choice for the patients, is now undergoing public consultation. The new system separates the organisation and provision of health services and will allow patients to choose their social and health care providers from public, private and third sector service providers. There could be considerable challenges in organising the freedom of choice in a way which does not increase costs or result in cherry-picking of easy-to-treat patients. Different models of freedom of choice will be piloted in five areas in 2017.

The reform is expected to also address some of the existing challenges related to the social care system. Access to services is currently uneven and the proportion of people reporting unmet medical care needs due to the waiting time is far above the EU average (3.2 % in Finland vs 1.1 % in the EU). The current organisation of the healthcare system results in a strong contrast between occupational healthcare with fast access and public healthcare with long waiting lists. At the same time the need for social and health services is growing as the population ages. The occupational health care system is envisaged to remain in place in the new system. The Finnish long-term care (social care) system faces serious challenges such as the high demand for care, the need to ensure that resources are directed at those that need care the most and can least afford it, and fragmented governance.

The reform will also change the local administration system. It will shift responsibility and resources from the municipalities to the counties that will be created on top of the municipalities. A high number of employees will be transferred from the municipalities to the new counties. The counties have also other duties in addition to social and health tasks such as organising the public employment services in addition to social and healthcare related tasks. The funding will come in the form of government transfers as the counties will not be able to levy taxes. As employment shifts from municipalities to the regions, the capability of municipalities is likely to be at least temporarily weakened. A temporary administration will start preparing the launch of activities in July 2017, when laws come into force following the completion of the parliament process expected to last until spring 2017. Elections for the new county councils will be held in the spring 2018 and the new counties will start to operate from the beginning of 2019.

4.1.3. FISCAL FRAMEWORKS

The central government fiscal framework is tied to multiannual expenditure ceilings. To date, the framework has proved to be effective. At the beginning of the government's term, the expenditure ceilings are set for a four year period according to the government's fiscal policy. Thereafter, each spring the government updates the limits on central government spending for the remaining years of its term, establishing the multiannual financial framework. The ceilings are set in real terms. The framework includes built-in automatic stabilisers, as some spending, such as unemployment expenditure or interest payments, falls outside its scope.

Neither nominal-balanced-budget requirements nor limits on annual deficits are included in the legislation. Following the ratification of the fiscal compact, a structural balance rule has been turned into national legislation. In autumn 2016, the government initiated legislative changes to remove government discretion on whether to launch the automatic correction and implement the 'comply or explain' principle, so that the government will in the future need to automatically respond to the observations of the Fiscal Council.

The National Audit Office has been entrusted with the responsibilities of the Fiscal Council while the Ministry of Finance remains responsible for forecasting. The National Audit Office monitors the implementation of the fiscal rules, in particular the compliance with the medium-term budgetary objective. The macroeconomic forecasts underlying the stability programme and the draft annual budget are prepared by the Department of Economics within the Ministry of Finance. Finland is the only euro area Member State that has designated a Ministry of Finance department as the independent forecast producer referred to in the two pack([7]).

4.1.4. TAXATION

Finland remains a relatively high tax country. In 2015, the tax burden was about 44.1 % of GDP, slightly higher than in 2014 when it was at 44.0 %. In 2016, the tax burden is expected to be broadly unchanged. The 2017 budget includes tax measures which are expected to contribute to a tax shift from labour towards more growth-friendly tax bases.

Personal income tax, employer and employee social contributions are to be reduced as part of the reform measures to increase cost-competitiveness. Personal income tax cuts will be implemented through cuts of all tax rates and through increased deductibility of earnings from taxable expenditure. However, assessments of a package of various tax measures show that the impact on the disposable income will be the smallest among low income earners and is likely to have no impact on inequality. ([8]) The measures lead to a fall in general government revenues as of 2017 but the Competitiveness Pact also eases cost pressures in the public sector.

Securing investment that meets the long-term needs of the economy remains a challenge. While investment levels remain slightly above the EU average, they have been declining during the recent years. The share of private investment is on average lower than elsewhere in the EU. The Ministry of Finance has appointed an expert group to review the level and structure of corporate taxation to assess how it could best contribute to competitiveness, growth and productivity. The mandate of the expert group covered various aspects of corporate taxation, including its impact on financing, investment and R&D. The group will also review the economic effects of taxation of dividends and other taxes on financial products. The group's work will be supported by a research project coordinated by the VATT and ETLA research centres. The researchers have produced a report analysing the various options to improve the system (Prime Minister's Office 2016). The report should be finalised by the end of 2017 and is expected to include specific policy recommendations.

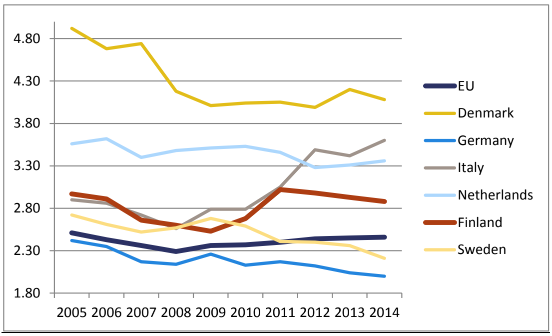
Some features of the tax system may discourage companies from growing. Under Finnish tax legislation 85 % of dividends received from publicly listed companies are taxable income for the shareholder. The taxation of dividends received from non-listed companies however depends on the net assets that a company holds. As long as the

([7]) A pair of regulations that apply to euro area Member States. They strengthen economic coordination by requiring Member States to submit draft budgetary plans and introduce enhanced surveillance for those facing severe financial difficulties.

([8]) Legislative proposal HE 135/2016 Hallituksen esitys eduskunnalle vuoden 2017 tuloveroasteikkolaiksi sekä laiksi tuloverolain muuttamisesta dividend remains below 8 % of net assets and below 150 000 euros, 75 % of this dividend is considered to be non-taxable revenue. The tax-exempt part falls to 25 % as regards dividends exceeding 8 % of net assets. If the dividend remains below 8 % of net assets but exceeds 150 000 euros, the tax-exempt part is 15 %. Such artificial thresholds may provide incentives to engineer the capital position of the company and the amount of dividends paid so that the tax advantage can be used to the maximum (ETLA 2014). It may also discourage companies from growing and/or listing their shares on a stock exchange.

Environmentally-harmful subsidies remain in place in the traditional sectors of the economy. Most of these subsidies are provided through the tax system in the form of exemptions and reduced rates on specific industrial activities and fuels. Their annual impact has been estimated by the Ministry of Environment, in co-operation with the Ministry of Finance, at 1.5 % to 2 % of GDP. The government reintroduced as of 2017, tax refunds for the mining industry which were removed in 2015. In addition, the government has proposed to introduce a new subsidy to compensate energy intensive industries for indirect expenses incurred from emissions trading. From 2017 to 2019, the net annual revenue impact of this new subsidy is expected to amount to 43 million euros per year and reach 46 million euros in 2020. The revenues from environmental taxation are above the EU average, but are on a decreasing trend (see Graph 4.1.3).

Graph 4.1.3: **Share of environmental taxes in GDP, selected EU countries**



Source: European Commission

4.2. FINANCIAL SECTOR

4.2.1. BANKING SECTOR

The Finnish banking system has remained strong and stable despite the overall weakness in the economy and the record low interest rate environment. Short-term risks to financial stability are low despite the high level of households' indebtedness. Finnish lenders remain remarkably well capitalised and have high loss absorption capacity. Their asset quality is among the highest in the EU. The banking sector is large and concentrated: the assets are equal to about 300 % of GDP and the three largest banks control the market. Areas that remain potential sources of risk are the strong regional interconnections with other Nordic and Baltic countries and the dependence on wholesale funding.

Lending to the private sector remains on a stable growth trend. In general, the banking system has rapidly passed on the record low interest rates to the real economy. By June 2016 lending to firms grew by 4.2 % year-on-year, while the mortgage loans segment increased by 2.6 % year-on-year. These positive credit developments also reflect improving levels of consumer confidence, in particular an increasingly favourable view of consumers regarding their personal finances and expectations about future purchases, which has supported retail sales and the housing market in 2016.

Table 4.2.1: **Key banking sector indicators**

	2010	2011	2012	2013	2014	2015
Non-performing loans	0.9	0.8	0.8	0.7	1.4	1.3
Coverage ratio	-	-	-	-	36.0	37.9
Loan-to-deposit ratio*	139.3	142.3	139.9	139.2	139.6	136.7
Tier 1 ratio	14.7	15.2	18.1	16.9	16.6	22.4
Return on equity	6.8	7.6	8.9	8.1	9.1	8.3

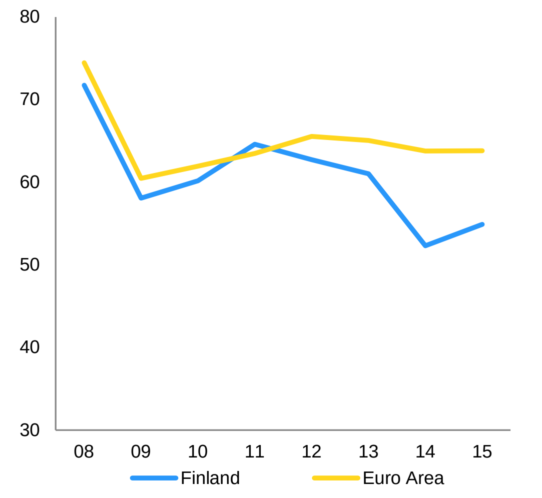
Source: ECB, CBD

The relatively high reliance of banks on wholesale funding entails a contingent refinancing risk. Finnish banks rely heavily on wholesale funding and, alongside the public sector, are the largest issuers of debt securities. The banking system-wide loan-to-deposit ratio is relatively high at close to 140 %. The share of private sector deposits in the domestic banking system represents 34 % of total liabilities and is much lower than the euro area' average of 54 %. It is compensated by the system's higher reliance on debt issuance (market funding), external liabilities (market funding outside the euro area) and remaining liabilities (mainly the derivative portfolio of the Nordea group). Banks maintain large portfolios of liquid assets available for sale to generate emergency cash. Wholesale funding, especially with short term and foreign currency instruments, may be a volatile funding source, in particular during adverse market conditions. However, banks can have strategies to mitigate this risk such as liquidity buffers.

Financial soundness indicators show that the financial system is in good condition. This is despite low interest rates and the difficult macroeconomic environment. Banks are well capitalised: at the end of 2015 the average Tier 1 capital ratio was 22.4 %, one of the highest in the EU. Tier 1 instruments account for the majority of the capital (see Table 4.2.1) on the system's aggregate balance sheet. The high level of capital was also reflected in the good results achieved by the largest banks operating in Finland in the 2016 European Banking Authority stress test, where the capital levels of the largest lenders remained good in both the baseline and in the stress scenario. The average quality of bank assets is very high in comparison to other EU countries: the ratio of non-performing loans to gross loans was just 1.3 % in December 2015 whereas the EU average was close to 6 %. The sector also performs well in terms of profitability. In 2015, return on equity (8.3 %) and return on assets (0.5 %) were much above the euro area average (4.4 % and 0.3 %, respectively). Nonetheless, the exceptionally low interest rate level puts a strain on banks' net interest income, typically the core item in banks' profits – the net interest income dropped by about 5 % from the 2014 level in 2015. However, the Finnish banks have controlled their costs more efficiently than their euro area peers.

At the beginning of 2017, Nordea Bank, a Swedish bank, converted its Nordic subsidiaries into branches. The local Nordea Banks are systemically important in each of the four Nordic countries. From now on, the supervision of Nordea Bank Finland is the responsibility of Sweden's financial supervisory authority. In Finland, Nordea is one of the biggest banks, with a market share of close to 30 % in lending and deposit taking. Unless there is increased collaboration between the Finnish and Swedish supervisors, the change may seriously constrain the Finnish authorities' insight into the business of one of the largest financial institutions in the country, and its ability to carry out macroprudential policy. To deal with the new situation, the Nordic financial supervision authorities and the ECB have agreed on arrangements concerning information sharing, supervisory responsibility and cooperation, macroprudential policy, depositor protection and recovery and resolution planning ([9]).

Graph 4.2.1: **Banks' costs-to-income ratio, %**



Source: European Commission

4.2.2. ACCESS TO FINANCE

Equity is the main source of financing for Finnish companies. Nasdaq Helsinki Oy stock exchange, which is part of the Nordic OMX-Nasdaq exchange, is very deep. In 2015, the total stock of listed shares issued by firms increased to 74 % of GDP from 68 % in the previous year Recently crowdfunding has gained popularity. The Ministry of Finance estimates that crowdfunding roughly doubled to about 150 million euros in 2016. The Crowdfunding Act, regulating the market, came into force in September 2016. In more traditional growth-company financing, venture capital investment was 122 million euros in 2015 (FVCA, 2016). As a share of GDP, venture capital investment in Finland is one of the highest in the EU and twice as high as the EU average. While SMEs depend mainly on equity and bank financing, big corporations have a wider variety of financing at their disposal. Overall, market debt funding of non-financial corporations increased until 2013, when it reached 18 % of GDP, but fell during the subsequent years to 31 billion euros or 15 % of GDP in 2015, just below the EU average.

SMEs' access to finance is good. Following a decline of more than 40 % from 2008 to 2014 — due to lower demand, tighter credit conditions, solvency problems in some companies, and other factors — lending to SMEs grew by 26 % from 2014 to 2015, reaching the highest proportion of total bank lending since 2007. Recently, the stock of long-term loans to non-financial corporations has been increasing faster than shorter maturity loans, indicating that SMEs borrow for investment rather than for working capital (see Graph 4.2.2). Despite the good overall picture, some obstacles such as lack of collateral might prevent some SMEs from using external financing. In a recent survey, 10 % of SMEs signalled that they had not applied for financing during the past year although they would have needed it ([10]) (Yrittäjät, 2016).

The public sector complements market funding. The government growth financing and export guarantee vehicle Finnvera complements the supply of finance for SMEs, providing funding for expansion and internationalisation. Recently the government has directed more resources towards start-ups and SMEs via Finnvera and increased the fund's capacity for export guarantees. Roughly one SME in five turns to Finnvera rather than the banking system for financing (Yrittäjät, 2016). However, given the abundant or low cost financing, not all economically or financially unviable companies exit the market. These companies continue to tie up capital and the labour

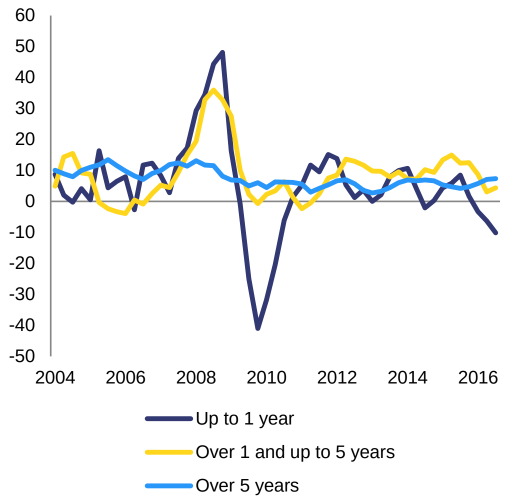
([9]) Memorandum of Understanding between Finansinspektionen (Sweden), Finanstilsynet (Norway), Finanstilsynet (Denmark), Finanssivalvonta (Finland) and the ECB on prudential supervision of significant branches in Sweden, Norway, Denmark and Finland of 2 December 2016; Memorandum of Understanding between the Finnish, Norwegian and Swedish Ministries of Finance and the Danish Ministry of Business on cooperation regarding significant branches of cross-border banking groups of 9 December 2016; Memorandum of Understanding on Cooperation regarding Banks with Cross-Border Establishments between the Central Banks of Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden of 15 December 2016.

([10]) In the same survey, only 4 % of respondents indicated that they had received a negative financing decision on their loan application.

force preventing a more efficient resource allocation (OECD, 2016e).

The EU funds foster financing to Finnish SMEs. In September 2016, an agreement was reached on the implementation of the SME initiative. By combining national budget funding with 40 million euros of its European Structural and Investment Funds and Horizon 2020 funding, to be leveraged with commercial banks through a risk-sharing mechanism, Finland expects the initiative to release 400 million euros of new SME financing (TEM, 2016). The European Fund for Strategic Investment has also contributed towards the investment projects. The Investment Plan for Europe has already benefited around 300 Finnish SMEs via a financing agreement amounting to 75 million euros (European Commission et al, 2016).

Graph 4.2.2: **Growth of banks' loans to non-financial corporations, %, y-o-y, 2004q1-2016q3**

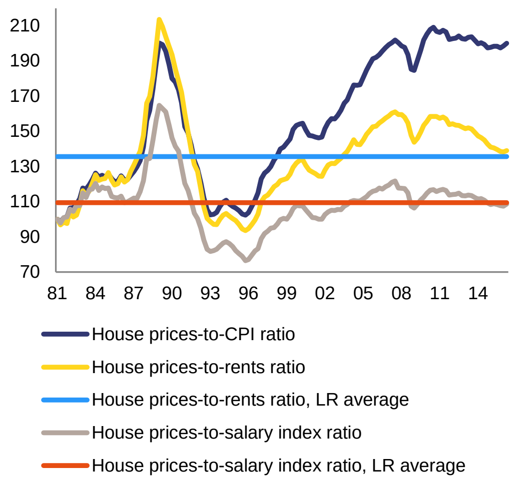


Source: Bank of Finland, European Commission

4.2.3. HOUSING MARKET

The fall in house prices bottomed out in 2016. House prices fell during 2014 and 2015 in both nominal and real terms and are not currently thought to be over or under valued. The house prices-to-salary index or house prices-to-rents ratios are close to their long run averages (see Graph 4.2.3). Recently rents have been increasing rapidly especially in attractive urban regions such as the capital city region, where the demand for small apartments has been increasing. In the course of 2016, nominal house prices have started to increase in the capital city region while they remained flat in rest of the country. The European Systemic Risk Board (ESRB) issued a warning to Finland (as well as to seven other Member States) in November 2016 on the medium-term vulnerabilities of the residential real estate sector as a source of systemic risk to financial stability. The ESRB highlighted the fact that household debt is not evenly distributed across households and that a possible materialisation of risks could have large spill-over effects to neighbouring countries through the Baltic-Nordic banking sector.

Graph 4.2.3: **Relative house prices, Finland**



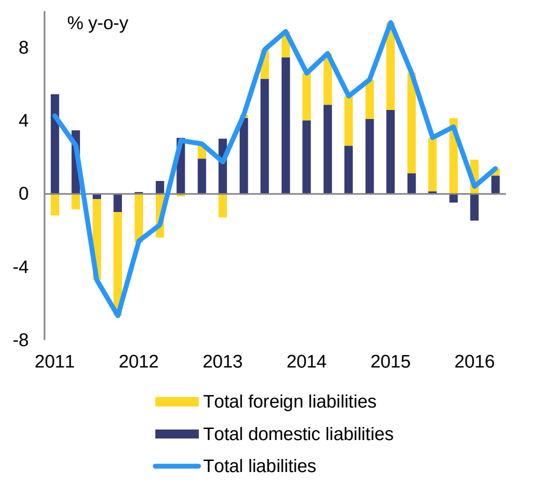
(1) Data until June 2016
Source: Bank of Finland, European Commission

4.2.4. PRIVATE INDEBTEDNESS*

Non-financial corporate debt increased rapidly in 2015, but since then the rate of increase has levelled off. Foreign counterparts account for roughly one-third of Finnish non-financial corporations' liabilities (e.g. bonds, loans, shareholder equity), the remaining liabilities are accounted for by domestic counterparts. Non-financial corporations' foreign liabilities increased altogether by about 14 % in 2015 while domestic liabilities remained broadly unchanged. The main drivers for foreign liabilities were intra-group loans and the increase in foreign direct investments. Since this recent increase in liabilities was mainly driven by debt instruments, non-financial corporations' debt-to-GDP ratio increased in 2015. The situation reversed in the first half of 2016, when credit flows turned negative while nominal GDP growth accelerated.

Finnish firms have held a significant positive net lending position since 1993. Their gross operating surplus would have been more than sufficient to finance all the gross fixed capital formation. However, in parallel to the surplus, non-financial corporations have increased their borrowing. It appears that the corporations have used their leverage to acquire financial assets both in Finland and abroad. Most of the assets they acquired were loans, trade credits and shares.

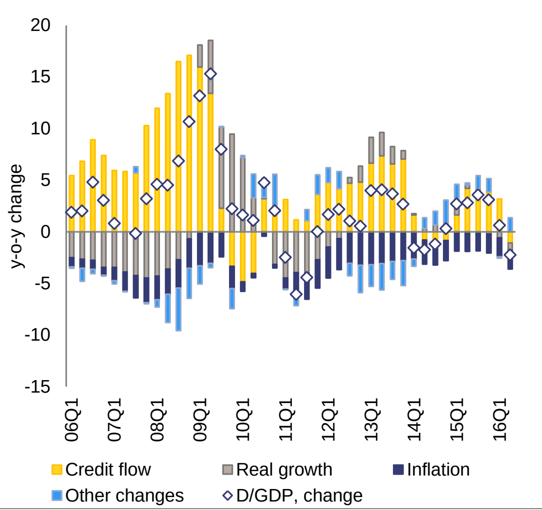
Graph 4.2.4: **Non-financial corporations liabilities, %, y-o-y**



Source: Statistics Finland, European Commission

On aggregate, Finnish non-financial corporations appear to engage in borrowing in order to issue loans and to acquire unquoted shares. In 2015, the property income of the non-financial corporate sector was equal to 32.5 % of their gross operating surplus. This suggests that the Finnish companies earn a significant share of their income from financial investments. To a large extent, the borrowing is carried out by large companies. Based on the Orbis database (Bureau Van Dijk), those companies with the largest debt are energy and forestry sector firms that also have large assets both in Finland and in other countries.

Graph 4.2.5: **Drivers for non-financial corporations debt-to-GDP ratio**

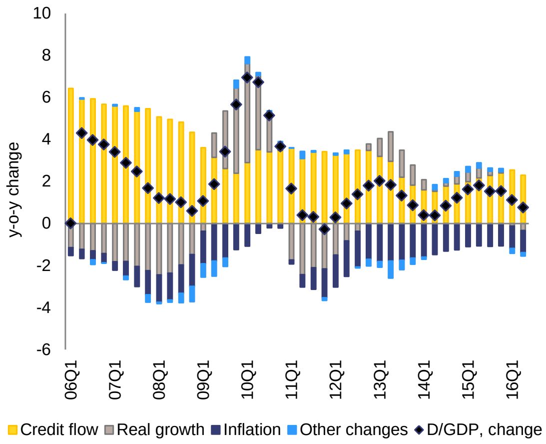


Source: European Commission

Households' net financial assets increased in 2015. Households' debt-to-GDP ratio increased from 65.5 % in 2014 to 66.8 % in 2015. The interest rates were favourable and the banks offered their customers the possibility to stop housing loan amortizations for one year. This offer was widely used. On the asset side, households' financial assets rose in 2015 to 143.6% of GDP. Finnish households own a rather diverse mix of different financial assets. The rate of ownership of mutual fund shares and publicly traded stocks is the highest in Europe, perhaps indicating high financial literacy. Households between income deciles III and IX have negative net financial asset position as these households typically also have a mortgage. Taking into account real assets, such as apartments, households in almost all income groups, including the top and bottom deciles, have positive net assets. (ECB, 2016)

Household saving decisions could be affected by characteristics of the pension system. The earnings related pension system is partially pre-funded and covers the majority of the pensioners. The contributions to the pension system are compulsory and paid regularly by the employer. Over the years, the system has accumulated pension funds that currently amount to nearly 90 % of GDP. The existence of these pension funds is likely to influence households' saving decisions, limiting the need to accumulate financial assets on private accounts. In a recent international comparison, the Finnish pension system was ranked on top especially in reliability and transparency (Melbourne Mercer Global Pension Index, 2016).

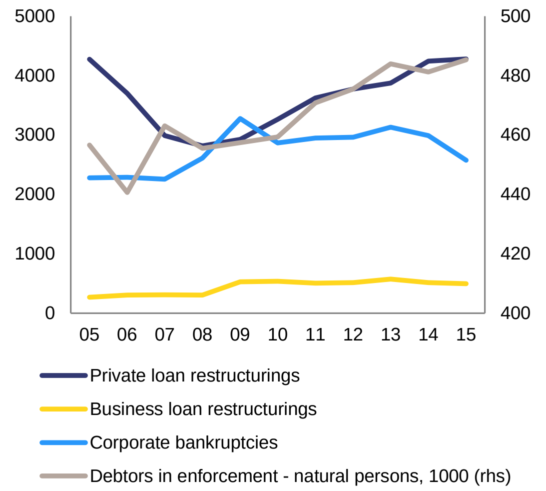
Graph 4.2.6: **Drivers for households' debt-to-GDP ratio**



Source: European Commission

While the amount of non-performing loans in the banking sector remains low, other indicators show some signs that require monitoring. The number of private loan restructuring applications was on an increasing path since 2008 until 2016 when the number of applications decreased slightly. The number of distraint cases peaked in 2013 and has been declining since then. However, at the end of 2016, the number of people who had been flagged in the database of credit information company Asiakastieto, as having problems to fulfil their financial obligations, was about 1 % higher than one year earlier, reaching 8.7 % of the adult population. The population group with most problems are males aged 25 to 44. Amongst this group, about 15 % were black-listed in the database.

Graph 4.2.7: **Loan restructuring, debtors in enforcement**



Source: Statistics Finland, European Commission

Measures to limit the risks related to household debt have been introduced. In June 2016, a maximum loan-to-value ratio for housing loans was introduced, at 90 % (95 % for first time buyers). A 10 % minimum average risk weight for housing loans will be introduced in July 2017 for banks that have adopted the Internal Ratings Based Approach (IRBA). The minimum level of the risk weight was increased because the risk weights based on the IRBA are low in Finland by international comparison and vary significantly between credit institutions. The decision is expected to strengthen banks' capital adequacy and to reduce the demand for housing loans through an increase in interest spreads. The tax deductibility of interest payments on housing loans has been gradually reduced. In 2014, 75 % of interest payments were deductible. In 2017, the deductible share will decrease to 45 % and in 2018 stand at 35 %. These measures are expected to constrain the growth of households' debt.

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

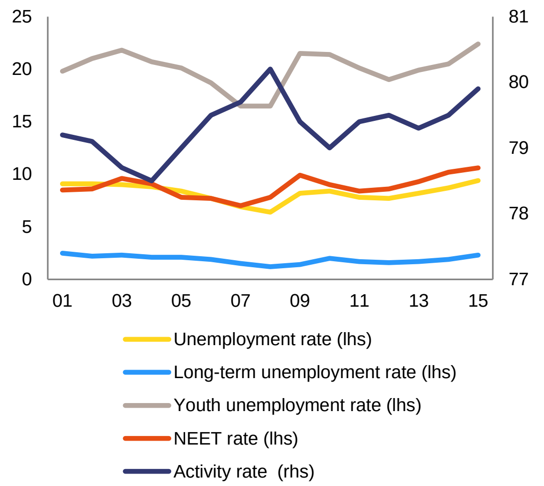
4.3.1. LABOUR MARKET POLICIES

As the economy has turned to growth, employment has started to increase and unemployment has started to decrease. Long-term unemployment, however, increased by 13 % and very long-term unemployment by 18 % year-on-year in 2016. (Ministry of Economic Affairs and Employment, 2016a). The activity rate among the 25-39 age group has declined since 2005, in contrast to the EU average, where it has increased. The rate is now below the EU average. Those who would like to work but are not seeking employment have increased, from 93 000 in 2008 to 152 000 in 2015 (63 % increase v 12 % at EU level). Disincentives to accept work and sluggish mobility between sectors and regions remain a challenge and can be a source of mismatches between labour supply and demand. Promoting job creation and the integration of those furthest away from the labour market (for example young not in employment, education or training, non-EU nationals) are major challenges for the Finnish labour market.

Restructuring of the labour market is underway. Manufacturing, which had one of the highest shares in employment in the EU, showed more than a 21 % decline in jobs between 2008 and 2015, due to a weak export performance. Other sectors have showed stable or growing headcounts: employment in services grew by 1.5 % over the same period, reflecting a restructuring towards services in the economy and in employment. The latest forecast from the Ministry of Economic Affairs and Employment (Ministry of Economic Affairs and Employment 2016c) shows that the labour demand would increase by 30 000 employees in total over 2016 and 2017, with construction and services contributing with respectively 15 000 and 20 000 additional employees.

There has been a decline in macroeconomic skill mismatches.([11]) That was partly due to a decrease in the share of low-skilled workers, even though their employment situation is worsening. Employment rates for different education levels have declined over recent years but more markedly so for low-skilled ([12]). This decline could be due to the retirement of less educated workers and cohort effect in the context of relatively stronger demand for high skills. At the same time, long distances and shortages of affordable housing in areas of high labour demand do not facilitate commuting and mobility and can be a source of mismatch between labour supply and demand. That is the case even if the regional dispersion of unemployment and employment rates does not look high in a cross country perspective. ([13])

Graph 4.3.1: **Key labour market indicators**



Activity rate and Employment rate as % of total population (20-64)
Unemployment rate and long-term unemployment rate as % of labour force (15-74)
Youth unemployment rate as % of labour force (15-24)
NEET: Not in employment, education or training as % of population (15-24)
Source: European Commission

Open vacancies stand at relatively high levels. The ratio of open vacancies to employment stands currently at a high level. The open vacancies-to-employment ratio was in 2016 almost as high as in 2007 but the unemployment rate was two percentage points higher. This may flag mismatches between labour demand and supply or low attractiveness of certain offer or little incentives to take up certain jobs. Labour shortages are more visible in certain sectors: real estate, professional activities, administration and support

([11]) The main indicators of macroeconomic skills mismatch in this analysis are dispersion measures of employment rates across skill groups. This is to proxy the gap between the skills that the working age population has and the skills needed (or used) in the economy.

([12]) Skills are proxied by the maximum educational level attained. For more details, see Kiss and Vandeplas (2015) for more details on the methodology.

([13]) Both NUTS 2 and 3.

Box 4.3.1: Towards the Finnish wage-setting model – what are the challenges?

The challenge for the new more decentralized wage-setting system is to ensure the overall wage level is kept in line with productivity developments, while allowing for differences in productivity across sectors. The aim is to contribute towards improved competitiveness, economic growth and increased employment. Theory suggests that uncoordinated sector-level bargaining can deliver undesired macroeconomic results both in terms of employment and wage moderation (Calmfors and Driffil 1988, Calmfors 2001). This was witnessed in Finland also in 2007-2008 when significant wage hikes were experienced as a result of sector-level bargaining. However, more recent experiences show that global competition has a moderating impact on wage costs also under this model (Obstbaum & Vanhala 2016, Calmfors 2001, Danthine and Hunt 1994). Still, as a general rule, decentralisation of collective bargaining and wage-setting should also be accompanied by reinforced coordination across the sectors in order to avoid wage hikes (Calmfors 2001, Obstbaum & Vanhala 2016). Such coordination can also have a positive impact on employment (Obstbaum & Vanhala 2016). The wage-setting model currently being planned in Finland is inspired by the Swedish model, where wage agreements have been negotiated at sector level since the 1990s. Following wage hikes in the 1990s, the wage coordination across sectors in Sweden is now conducted by the confederations of employees organisations to ensure that all the sectors apply the wage norm set by the tradable sector (Bergholm & Bieler 2013).

service activities. ([14]) The employment share in these sectors has increased over time and the share in unemployment has declined substantially since 2008.

In the follow up to the Competitiveness Pact (see Box 1.1), social partners agreed to prepare a new "Finnish model" for wage-setting to enable competitiveness. The new wage-setting model is a move away from centralised wage-setting. ([15]) It will allow for productivity differences to be reflected in wages across different sectors. At the same time the wage norm set by the tradable sector will impose a ceiling for the other sectors. The first round of wage negotiations under the new Finnish model will take place in 2017 for 2018 wages, but the order of sectorial negotiations and the degree of coordination across sectors remain unclear. It is envisaged that the Bank of Finland would provide an outline of the economic situation in Finland as a starting point for the negotiations. Overall, the decentralization of wage-setting may have a positive effect on employment if it shifts adjustment to shocks from the quantity of labour to the price of labour, and if a sufficient coordination is ensured.

Social partners have agreed to increase the possibilities for firm-level collective bargaining. Possibilities for local bargaining ([16]) are included in 86 % of the current collective agreements of organised employers (EK, 2016). About 70 % of sectoral collective agreements contain a 'crisis clause' (determining when it is possible to deviate from their conditions on issues such as wages and working time) and 30 % of them have a work time bank ([17]) ([18]). It remains to be seen to what extent the crisis clauses will be used in practice. Successful local bargaining will require the willingness and capacity to negotiate (Kröger, Mähönen, Klemetti, Nieminen, Finnish Labour Review 2016). The possibilities for local bargaining included in the Competitiveness Pact are available for organized employers as parties of the collective agreements. The unorganized employers have to follow those sectoral collective agreements which have been declared as generally binding.([19])

Employment outcomes are hampered by disincentives to work, as reflected by above-average unemployment and inactivity traps

([14]) These sectors are considered jointly in the analysis.
([15]) The Finnish Confederation of Industries announced in 2016 that it will no longer participate in central wage-setting negotiations.

([16]) These collective agreements allow for local agreement on some issues, such as how the increase of working time in the competitiveness pact will be implemented.
([17]) A flexible working time arrangement, where overtime can be compensated by leave.
([18]) All calculations are based on the membership organisations of the Finnish Confederation of Industries (EK) and do not include employers who are not members of EK.
([19]) The employers' organisation density is around 65 % (based on 2013 figures from Eurofound).

resulting from the interplay of tax and benefits systems. In 2015, the unemployment trap was 76.1 %, against an EU average of 69.3 % ([20]). The inactivity trap is also much higher than the EU average (68 % v 56.1 %) ([21]) suggesting that in some cases moving into a paid job is not sufficiently attractive. Traps are particularly high for single parents (75.0 % v the EU average of 54.5 % for those with two children). Means-tested social assistance and housing benefits may create most of the disincentives to work (EC-OECD Tax and Benefits database; Viitamäki, 2015). The administrative complexity (bureaucratic traps) related to the reinstating of benefits for those moving in and out of the labour market, is also causing barriers to work. The decision process and the waiting period to get benefits reinstated can take weeks. The situation is expected to improve when the updated income register comes into force in 2020. Meanwhile, some unemployment funds (private or administered by the trade unions) are making attempts to digitalise their systems to make the application and decision process faster.

Strengthening incentives to work is the key to increase labour market participation. Narrowing the eligibility to some benefits, strengthening conditionality or increased sanctions in case of non-compliance with activation requirements are some of the measures proposed by the government. For instance, the participation in active labour market policy measures will be a condition for receiving unemployment benefits. As of 2017, jobseekers will in some cases have to accept work not matching their professional background, work with lower earnings than income through unemployment benefits, work located within a three hours total daily commuting time or short-term work assignments in order to keep their benefits. The duration of the earnings-related unemployment benefit was reduced from 500 to 400 days (from 400 to 300 days in the case of a career shorter than 3 years) at the beginning of 2017. Positive incentives were introduced too: allowing the use of basic (non-earnings related) unemployment benefit as mobility and wage subsidies to activate jobseekers. Unemployment benefits can also be received while working as a part-time entrepreneur or as start-up grants.

The introduction of in-work benefits is likely to increase incentives to work. Some in-work benefits were introduced in 2014 and 2015. ([22]) The initial results of these benefits show an increase of unemployed ([23]) people receiving another income from 6.7 % in 2013 to 10.6 % in 2015 (Kela, 2015). However, there is also some indication that the person moves to a different type of trap, i.e. from unemployment to a low-wage trap ([24]) (Kotamäki & Kärkkäinen, 2014), in a context where the low-wage trap is already higher than the EU average (55.8 % against 47.3 %). In-work benefits can result in subsidising employers paying low wages work instead of providing incentives to work.

Increased incentives to work bring the best benefits when coupled with effective active labour market policies. There are plans to use the unemployment benefits to fund active measures and to concentrate on the most effective measures. Given the ongoing economic restructuring, it is important to ensure that workers are retrained to provide them with the skills demanded by employers and to improve labour market matching (Andersen & Svarer, 2011). ([25]) The provision of labour market training, designed in close collaboration with local employers, and found to be relatively successful, is expected to continue. In addition, expanding the possibility to participate in studies while receiving the unemployment benefit, is under discussion ([26]).The social partners could play an increased role in the process of job-to-job transitions with a stronger focus on job search support in compensation packages (OECD, 2016).

([20]) Measures what percentage of the gross earnings (after moving into employment) is 'taxed away' by the combined effects of the withdrawal of benefits and higher tax and social security contributions. The figure is for single persons without children earning 67 % of the average wage when in work.

([21]) Measures the financial incentives to move from inactivity and social assistance to employment. It is defined as the rate at which the additional gross income of such a transition is taxed.

([22]) 300 EUR protected part of the unemployment benefit. For further information, refer to the 2015 Country Report on Finland. A ministerial assessment of the impact of these measures on employment will take place in 2017.

([23]) These persons are still recorded as unemployed given the short duration of their assignments.

([24]) For low wage earners seeking higher incomes a higher proportion of their earnings would be 'taxed away'.

([25]) Torben M. Andersen and Michael Svarer, Business cycle contingent unemployment insurance, in Nordic Economic Policy Review, 1/2011

([26]) A tri-partite group is looking into this issue, the deadline for their conclusions is in the spring 2017.

From 2017 all unemployed will have regular meetings with public employment services. This new measure aims at a faster re-employment. The government has reserved extra funding to implement the measure. This will be done partly in co-operation with private sector service providers. There are plans to outsource part of employment services when the responsibility for these services is transferred from the municipality to the newly created regional authorities. It remains to be seen whether private partners will be provided with appropriate incentives, in order to avoid "creaming" effects (resulting in additional disadvantage for the unemployed facing the strongest barriers (European Job Mobility Laboratory, 2011)), and also to ensure permanent returns to the labour market. The long-term unemployed in need of additional support have been receiving increased support since 2016 through one-stop-shops providing a range of services (social support, health services, rehabilitation). While the coverage of long-term unemployed is well ensured, reaching out also to those who are inactive and not looking for work could provide better labour market outcomes.

Some recent measures allow early retirement for the long-term unemployed, which goes against the objective of extending working lives. The government is preparing a specific legislation that allows the retirement of those long-term unemployed who on 1 January 2016 were over 60 and who have been unemployed for more than five years. There are some 35 000 long-term unemployed who are over 60 and 5 300 of them will fulfil the criteria under the new law. The additional costs of this measure are calculated to be approximately 16 million euros over the next decade. As this is the second time that such legislation is introduced (the last time was in 2005), expectations may build up that similar possibilities will be available again in the future. This may discourage those eligible (or expecting to become eligible) to seek employment.

Youth unemployment and the number of young people not in employment, education or training declined in 2016. The unemployment rate for those aged 15-24 declined by about 2 pps. to 20.1 % in 2016. The share of people not in employment, education or training increased steadily since 2011, reaching 10.6 % of the population aged 15-24 in 2015. In 2005-2015 (see Graph 1.3), the employment rate for the younger cohorts, especially men, declined more than the average for the economy ([27]). The lower employment rates for the young highlight the continued need for policies catered for the youth. Budget cuts in the youth guarantee services may affect in particular young people not in employment, education or training.

Employment of non-EU nationals is lower than native Finns, with the second generation also affected. In 2015, this employment rate gap (25.4 pp) was one of the highest in the EU and was significantly above the EU average (13.9 pp). Women from non-EU-countries had the lowest employment rate in the EU (35.7 %, 37.1 pps below native Finnish women). Inactivity is the main factor for the low employment of non-EU women whereas unemployment is the main factor regarding men. Overall, Finland's attractiveness for high-skilled immigrants has been limited, which has led to low levels of work-related immigration. Given the magnitude of recent inflow of asylum seekers (38.000, 0.7% of total population) and considering the low employment rate of refugees who had arrived before 2015, the labour market integration of refugees is a major challenge. If addressed well, the current inflow of refugees and migrants provides opportunities to counter the effects of an ageing population. Roughly one asylum seeker in four is estimated to ultimately receive a positive decision on their asylum application in Finland. Language barriers as well as lower levels of education and skills (see Section on education) constitute obstacles to labour market integration.

In response to an increase of asylum seekers, the government introduced a new integration pilot programme for migrants for the period 2016-2019. A new private sector initiative, supported by the Ministry of Economic Affairs and Employment and the Finnish Innovation Fund, Sitra, aims at training and employing at least 2 000 migrants in 2017-2019. The project using the social impact bond model offers migrants training that will make them more attractive to employers. Investors will fund the activities and carry the financial risks whereas the public sector will make the payments only if the employment objectives are met. In addition, there have also been efforts to

([27]) With the exception of young mothers direct European Structural Investment Funds towards activities that enable the integration of migrants.

4.3.2. SOCIAL POLICIES

A basic income scheme pilot has been running since the beginning of 2017. The pilot scheme aims at modifying the social security system to better adjust to the changes in working life, as well as tackling the complexity of the current benefits system and creating incentives to accept work. 2 000 participants aged 25-58 who were receiving the basic unemployment benefit at the end of 2016 are included in the pilot scheme. ([28]) They receive approximately 560 euros per month as basic income ([29]) without any means-testing and are able to accept work without losing the benefit. The experiment is expected to provide information about individuals' responses to changes in benefit systems. Such information could help design possible future reforms of the social security system.

The impact of motherhood on women's careers is high in Finland. The employment gap between women with a child younger than six years and women without children (20-49) was 15.7 pps in 2015 ([30]). In 2015, approximately 84 % of mothers (and 6.9 % of fathers) drew on the homecare allowance. The homecare allowance is likely to reduce labour market participation, with longer leave periods for those with a weak labour market attachment (Närvi, 2014, Bouget et al, 2015). Labour market prospects are likely to have been hampered by long periods of leave on the homecare allowance (Thévenon and Solaz, 2013), and the allowance is one of the potential causes of the higher than EU average gender pay gap ([31]). These assessments of home care allowance are limited only to the possible impact on labour market participation of mothers, without taking into account wider social policy objectives. Overall, more incentives could be provided to fathers to take leave to look after their children. In Finland only 8.8 % of men use paid parental leave during their lifetime, in comparison to 25.5 % in Sweden (Employment and Social Developments in Europe, 2015). ([32])

Improving female participation in the labour market hinges on measures to support young mothers' transition to work. Especially mothers with low education and weak labour market attachment, who are not provided with the right incentives, would deserve attention (Närvi, 2014, Bouget et al 2015). The parliament has amended the law that regulates fees for childcare resulting in lower costs especially for low income parents. The new childcare fees will come into effect in March 2017.

There are poverty and social exclusion risks associated with the lower labour market attachment of some population groups, such as the non-EU born. The employment rate of the non-EU born is low. The non-EU born who work register lower earnings (although the difference in earnings is smaller than the employment rate gap) and their in-work poverty rate is three times higher. This results in a poverty gap ([33]) of 23.3 pps, which is higher than the EU average of 17.4 pps. Also, recent reductions in the wage subsidy scheme have had a considerable impact on the employment prospects of those working for third sector organisations, who tend to be among the most vulnerable. The use of these subsidies has fallen from 14 000 in 2007 to 4 000 persons (SOSTE, 2016) and further cuts are planned.

4.3.3. EDUCATION AND SKILLS

Finland's education outcomes remain among the best in the EU but continue to weaken, particularly in science and mathematics. According to the 2015 OECD programme for international student assessment tests, the proportion of low achievers in Finland is among the smallest of the tests. However, compared to 2006, the proportion of poor performers in science has nearly tripled while the proportion of top

([28]) This benefit is available for unemployed jobseekers who have been in employment before but are not eligible for the earnings-linked unemployment benefit.
([29]) This amount is equal to the basic unemployment benefit minus tax.
([30]) Almost two times the EU average (8.6 % in 2015)
([31]) For further details, please refer to the European Commission 2016 report
([32]) Parental leave in Finland refers to leave provided to look after children from the age of 3 months to 9 months. Swedish parents are entitled to 480 days of parental leave, of which 90 days are reserved for the father,
([33]) Vis-à-vis the rest of the population.

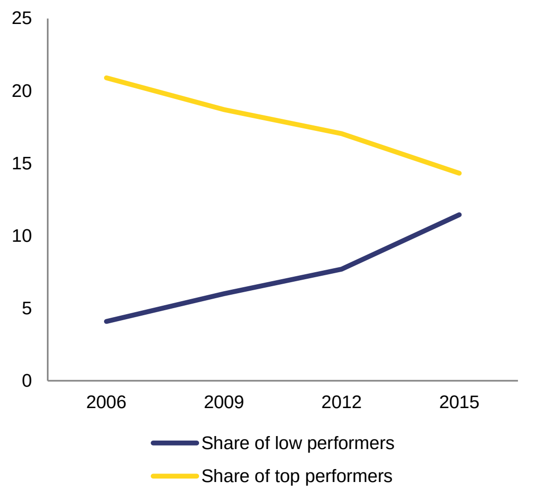
performers has dropped by about a third (see Graph 4.3.2.). Performance differences between regions have grown and the Helsinki area is doing significantly better than rural areas. The achievement gap between pupils with and without a migrant background is the widest in the EU (83 points) and remains among the largest also when adjusted for the socioeconomic status (65 points). This translates into a learning gap of two years and more.

Education expenditure has declined in recent years albeit from a comparatively high level. In 2015 general government expenditure on education was among the highest in the EU both as a proportion of GDP (6.2 %) and as a proportion of total general government expenditure (11.0 %). However, education expenditure has been cut in real terms since 2011 and the government's programme envisages further savings. In 2019 expenditure to GDP ratio is projected at around 0.4 pps. of GDP lower than in 2015 (0.7 pps. lower than in 2011). Reforms are being carried out to make the education system more efficient and effective. Skills erosion as a result of a weaker education system will become visible only over a longer period of time; similarly, any corrective policy action will take time to have an impact. Against the deterioration in the results of the programme for international student assessment results, and given the importance of a skilled labour force and strong science base for future economic growth, it is vital that cuts in education expenditure do not lead to skills erosion.

The universities aim at increasing the transfer of research output to the business sector. Current government reforms seek to encourage higher education institutions to develop a sharper strategic focus and clearer profiles in their fields of study. The government objectives are to shorten the time it takes to enter higher education and to move from graduation to work. Since the institutions are autonomous only limited public influence can be exerted via university financing agreements, legislation and informal steering. These actions fit the trend in other European countries. For further discussion, see section 4.5.1.

The vocational education and training reform is expected to be finalised in 2018. It aims at making vocational education and training more responsive to labour market needs by reducing the number of vocational qualifications available in Finland, broadening the qualification content and allowing for more individual study paths. This is expected to help reduce skills mismatches (see Section on labour market). Initial analysis of the impact of earlier cuts in government spending shows that vocational education and training providers have neither reduced study places nor the number of teachers and trainers, but have saved on other aspects such as equipment and investments. Therefore quality, free access for all and territorial coverage have so far not suffered. These issues will warrant close monitoring during the following stages of the reform.

Graph 4.3.2: **PISA: Share of top performers in science- Finland**



Source: OECD, European Commission

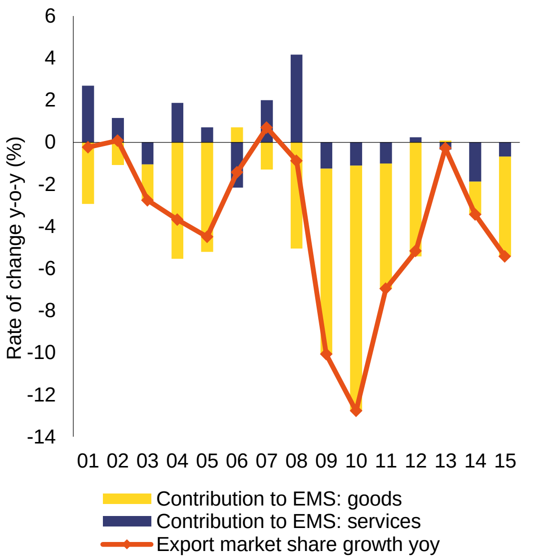
Action has been taken to integrate the recently arrived asylum seekers into the Finnish education system. The reception of asylum seekers is organised at the level of municipalities, which receive additional public funding per person, for a maximum of one year. This funding can be used to set up preparatory classes or to organise additional support in mainstream classes, or to provide a specific curriculum. At the national level, an action programme on the educational tracks and integration of immigrants was launched in 2016. The Ministry of Education has estimated the needs and costs of immigrants in education to amount to around 160 million euro annually.

4.4. INVESTMENT

4.4.1. EXTERNAL COMPETITIVENESS*

Exports of services have increased over the past 10 years, while exports of goods, which account for 70 % of foreign trade, are still more than 10 % below their pre-crisis level. The share of Finnish exports in the global markets has continued to decline for the past 10 years (see Graph 4.4.1).

Graph 4.4.1: **Breakdown of growth in export market shares**

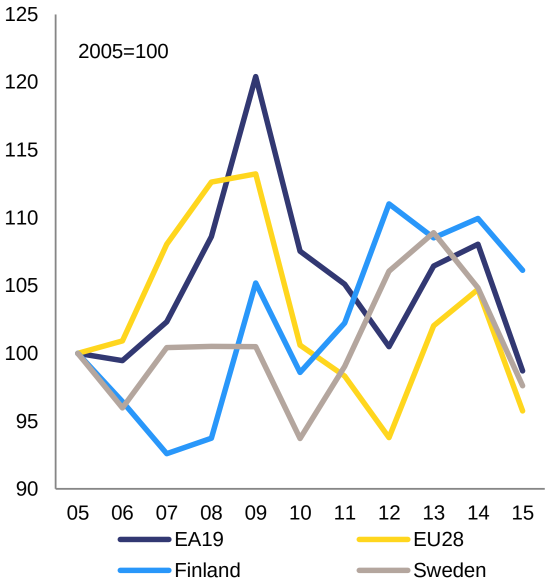


Source: European Commission

The export market share losses since 2008 coincide with a rapid decline of nominal cost competitiveness. The European Commission 2016 report for Finland discussed the developments in wages and productivity over that period in detail. On an aggregate level, the increase in aggregate nominal unit labour costs has slowed down in 2014-2016 owing to moderate collective wage agreements (see Graph 4.4.4). This indicates that also non-cost competitiveness factors have recently also had an impact on export performance.

In international comparison, part of Finland's cost competitiveness losses have been corrected since 2013. However, Finland's cost competitiveness in terms of the real effective exchange rate against 37 industrial countries, using unit labour costs in manufacturing as deflator, was still weaker in 2015 than 10 years earlier (see Graph 4.4.2). Other euro area Member States benefited more from the depreciation of the euro, as they were less exposed to the depreciating exchange rates of the Russian rouble and the Swedish krona (both countries are among Finland's main export destinations). Moreover, while Finland's relative unit labour costs in manufacturing have decreased, the decrease has been smaller than in Sweden or in the euro area on aggregate.

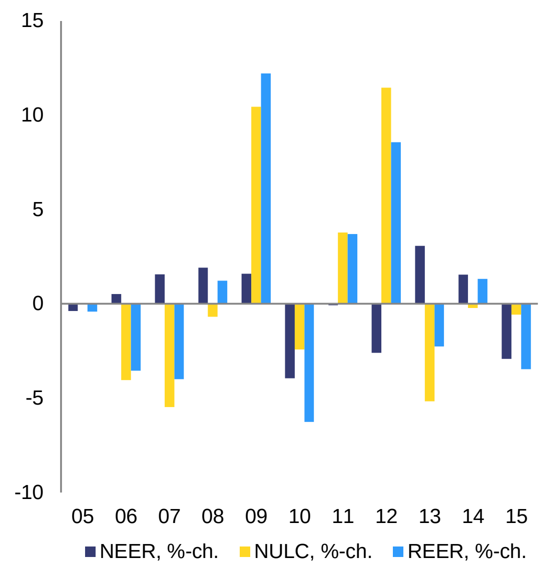
Graph 4.4.2: **Real effective exchange rates, selected countries, 2005=100**



Deflator: manufacturing NULC, REER calculated against 37 industrialised countries.
Source: European Commission

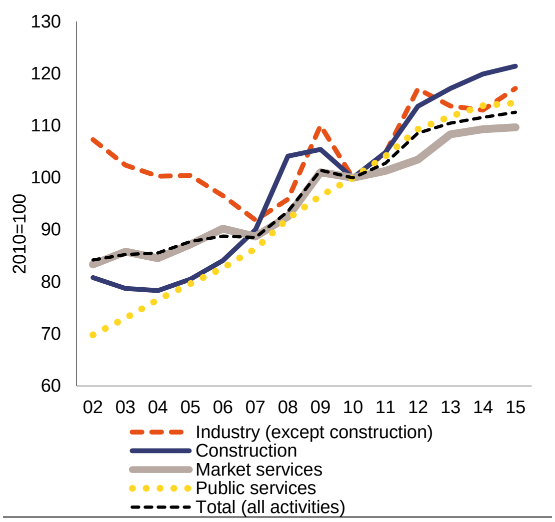
The design and implementation of future wage setting practices will play a key role in safeguarding competitiveness. As of 2017, a new collective wage agreement, the Competitiveness Pact, contributes to lowering wage costs in a step-wise manner (see Box 1.1). Overall, the measures in the Pact would result in a reduction of labour costs by approximately 4 % which will improve Finland's cost competitiveness. As shown in Graph 4.4.4 and discussed in the European Commission 2016 report, unit labour cost developments differ across sectors due to different productivity developments. In addition to the wage cost measures, the social partners agreed to develop a new wage setting model and increase local collective bargaining as discussed in Section 4.3. Wage-setting practices across industries in coming years will be the key to preserving cost-competitiveness.

Graph 4.4.3: **Drivers for REER developments, Finland**



When REER appreciates, competitiveness decreases.
Source: European Commission

Graph 4.4.4: **Nominal unit labour costs by industry, 2010=100**

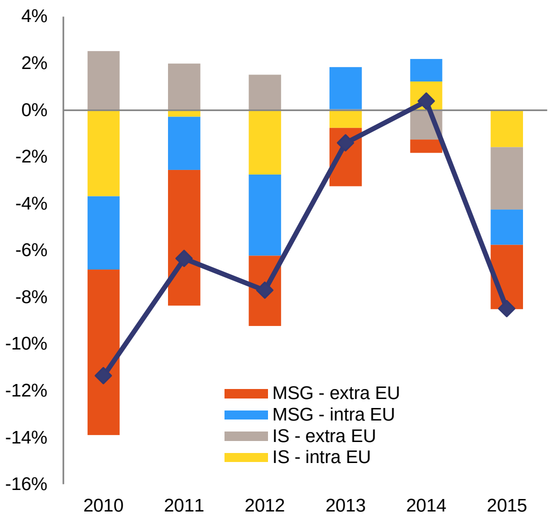


Source: European Commission

The continuous decline in goods exports and the loss of market shares, despite the gradual improvement in cost competitiveness, suggest that challenges remain in non-cost competitiveness and productivity. Labour productivity has stagnated and is currently at the same level as in 2011. In the same period, the contribution of total factor productivity to growth has remained negative. Low productivity growth has increased the pressure to reduce labour costs to retain competitiveness. As described in the European Commission 2016 report, Finnish companies have not reaped the full benefits of the growth in their export markets. However, Finnish exports of goods have grown less than the markets. The goods exports value has declined since 2013. In real terms the goods exports have slightly grown, and declined in 2015.

In recent years, Finland's main export destinations have been growing slowly. Economic growth in the EU has remained weak and the Russian economy fell into recession in 2014. As seen in Graph 4.4.5, about half of the estimated losses in Finland's share of the global export market in 2015 could be attributed to sluggish growth in those markets to which Finnish companies export. Over a longer time period, the main factor behind Finland's declining share of the global export market has been Finland's deteriorating competitiveness in the markets outside the EU.

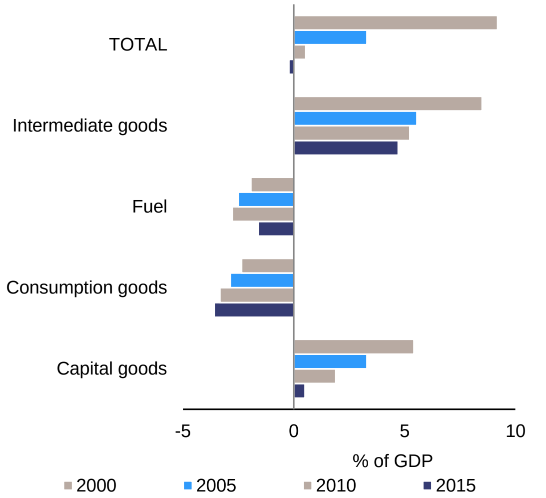
Graph 4.4.5: **Breakdown of export market shares, Finland**



Initial specialisation (IS) represents gains or losses stemming from the exposure to a certain market while market share gains (MSG) measure the performance within a certain market.
Source: European Commission

The current account surplus vanished after 2010 notably due to the elimination of the surplus in the trade of capital goods. Moreover, the surplus in trade of intermediate goods has declined while the deficit in trade in consumption goods has increased steadily as private consumption has increased (see Graph 4.4.6).

Graph 4.4.6: **Trade balance of goods according to broad economic classification of goods.**



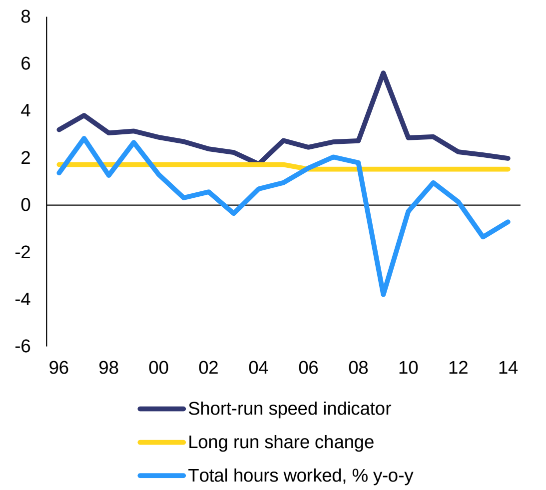
Source: European Commission

Intermediate products dominate goods exports. They account for about two thirds of goods exports, a much higher proportion than the EU average (somewhat below 50 %). Finland's role in global value chains is predominantly to supply intermediate goods to other economies such as China, Germany and Sweden. Intermediate goods also account for a large share, around 55 %, of imports. The share of foreign gross value added embedded in Finnish manufacturing value added was 38 % in 2011, slightly above Sweden and Denmark (Ali-Yrkkö, Rouvinen, Sinko, Tuhkuri 2016). However, the foreign content of exports has increased more than in the neighbouring countries or in the EU on average in 1995-2011. On the one hand, this is a sign of deeper integration into global value chains, but on the other hand means that exports create less domestic value-added and income than before. China and the United States were the most important individual countries as export markets in 2011, each representing around 3 % of Finnish GDP. Exports of goods and services to the EU as a whole accounted for almost 10 % of GDP (Ali-Yrkkö et al. 2016).

Exports in services have nearly doubled since the early 2000s. In 2015, the share of service exports ([34]) was at 11 % of GDP and accounted for 30 % of total exports. Exports of ICT services account for about 40 % of total services exports and record a large surplus. However, in recent years Finland has lost global market shares also in trade of services.

The structural change of the economy has stabilised. The speed of structural change can be approximated by an indicator that looks at changes in the shares of different industries in gross value-added or in employment (Hansson and Lundberg 1991). The indicator gets small values when most of the industries grow or decline at the same rate and large values when changes happen in few industries. At the peak of the crisis, export losses were accompanied by a rapid decline in the production and employment in the electronics and paper industries, but after this negative shock the production structure in the economy has remained rather stable.

Graph 4.4.7: **Speed of structural change, Finland**



The short run indicator is a sum of (absolute) changes in employment shares. The long run indicator shows an average change of the employment structure over 1996-2006 and 2006-2014.
Source: European Commission

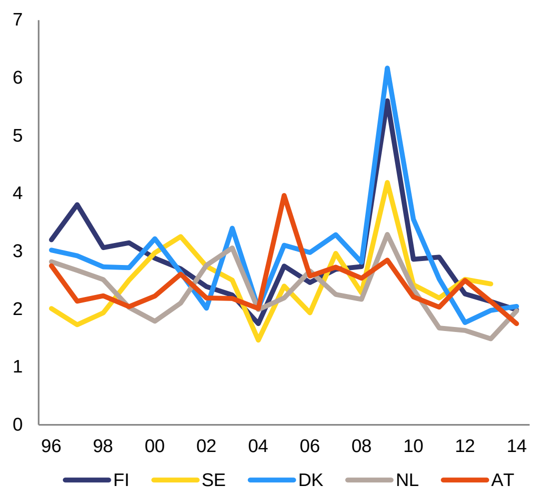
The losses in productivity and employment which materialised during the recession in 2012-2014 have not yet been reverted. Innovation and expansion of high productivity activities is needed, which would generate favourable structural change, but the indicators (see Graph 4.4.7) suggest that structural change has slowed down. Also the long-run indicator, which measures the changes in the production structure in two successive periods over 1996-2014, indicates a slowdown in the speed of change.

([34]) In national accounts terms, including trade of services and tourism.

The speed indicator for Finland has been varying within the same range as other peer countries' indicators. The rise of the ICT sector in late 1990s and the deep decline of manufacturing in 2009 are periods when Finland stands out in this sample.

Aggregate labour productivity has deteriorated significantly due to the decline of high productivity industries. The orientation of the economy towards higher-productivity industries was apparent in the late 1990s and early 2000s. The structure of the economy started to shift towards lower productivity sectors already in the early 2000s. The decline of the paper and electronics industries is accelerated 2008 and the productivity drop is more severe than in peer economies such as Sweden (shorter) or Austria (not as steep) (see Graph 4.4.9).

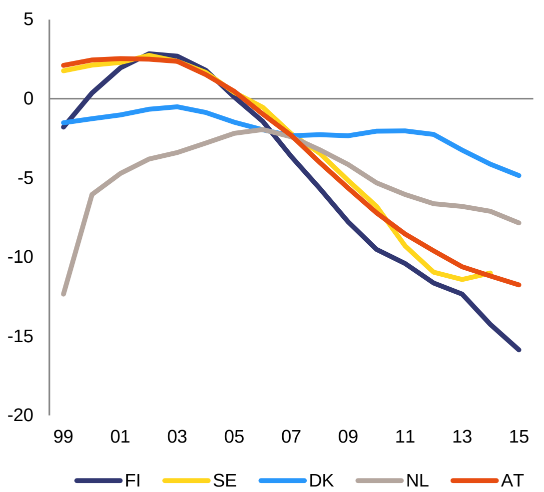
Graph 4.4.8: **Short-run speed of structural change, selected countries**



Source: European Commission

Structural changes have reduced the demand for labour in elementary occupations, while the number of jobs that require a higher education has increased. Reflecting the decline in manufacturing, jobs in elementary occupations (ISCO08 class 9) and in craft and related trades, such as construction workers or metal and machinery workers, (ISCO08 class 7) declined between 2005 and 2015. Also jobs in managerial occupations declined significantly, while expert jobs increased. Table 4.4.1 also illustrates the rapid decline in jobs which require at most lower secondary education (education levels 0-2), while jobs which demand tertiary education (education levels 5-8) have increased. The manpower requirement index ([35]) shows that over recent years jobs for workers with basic skills have declined while the demand for educated workers has increased. This has possibly worsened matching problems in the labour market and could partly explain why the estimated speed of structural change has slowed down in the past years.

Graph 4.4.9: **Reorientation of the economy towards lower productivity industries**



The graph illustrates how actual labour productivity compares to a counterfactual labour productivity using constant, average over 1995-2015, economic structure.
Source: European Commission

Table 4.4.1: **Changes in employment 2005-2015 by education and demand for more educated employment**

	Education levels			
Occupation	0-8	0-2	3-4	5-8
Managers	-6.6	-4.5	-3.9	-11.2
Professionals	7.6	1.1	3.2	16.8
Technicians and associate professionals	1.9	1.1	1.3	3.2
Clerical support workers	-0.7	-0.8	-0.6	-0.7
Service and sales workers	3.6	3.6	5.4	1.1
Skilled agricultural, forestry and fishery workers	-0.7	-1.4	-0.8	-0.3
Craft and related trades workers	-1.3	-1.6	-2.0	-0.2
Plant and machine operators and assemblers	-0.7	-1.4	-1.0	-0.1
Elementary occupations	-1.8	-3.6	-2.2	-0.2
Total	1.5	-38.1	0.1	24.0
Manpower requirement index		-7.5	-0.5	8.4

Education levels according to ISCED 2011:
0-2 Early childhood, primary and lower secondary
3-4 Upper secondary and post-secondary, non-tertiary
5-8 Short-cycle tertiary, bachelor, master doctoral (or equivalent)
Source: European Commission

([35]) Following Uusitalo (1999) and references therein.

4.4.2. INVESTMENT OUTLOOK

Investment has been limited. On one hand the increased labour costs and weakened terms of trade have led to a deterioration of real unit labour costs. Real unit labour costs give an indication of companies' profitability which has fallen and might partly explain lower investment. On the other hand, the Finnish export products might have fallen behind competitors' products in quality and innovativeness. Both these dimensions were discussed in more detail in the European Commission 2016 report.

Foreign direct investment to Finland is increasing while in net terms Finland has more investment abroad. In 2014 a few large acquisitions of Finnish companies increased foreign direct investment (FDI) into Finland to a record high 13.4 billion euros so FDI of about 1.3 billion euros in 2015 might seem disappointing. However, in 2015 the number of companies investing in Finland increased from the previous year ([36]). In 2015, the stock of inward FDI in Finland was about 74 billion euros while Finnish outward FDI was some 11 billion euros higher. Outward FDI decreased as net investment was negative, about -11.4 billion euros due to increased loans by foreign affiliates to their parent companies in home country (see Section on the financial sector and non-financial corporates).

Overall, Finland has room to increase foreign direct investment. Compared for example with neighbouring Sweden, the Finnish FDI stock-to-GDP is currently about 20 pps. lower. This is so despite the fact that, as Finland usually performs well in global competitiveness rankings. One reason for not attracting FDI inflows could be the small size of the domestic market. Finland, next to economically larger Sweden with more or less similar structural features of the economy, might not be the most natural choice for foreign investors. Also, a lack of national rules and procedures for companies to directly transfer their registered offices into and out of Finland makes it more difficult and costly for companies to take advantage of cross-border business opportunities.

([36]) http://www.investinfinland.fi/-/number-of-foreign-owned-companies-in-finland-grows-third-year-running

4.4.3. BUSINESS ENVIRONMENT

The business environment is an important enabler of company growth. The growth orientation of SMEs has increased: 11 % of small and medium-sized enterprises now declare that they are strongly growth-oriented, and 39 % plan to grow as far as possible (Yrittäjät, 2016a). Their main challenges are weak demand in the domestic market and increased competition. To promote the internationalisation of Finnish firms, a government initiative known as Team Finland provides services such as market research, networking, training and business development support and financing.

New legislation will support the introduction of new technologies, digitisation and new business concepts. As an example, the new Transport Code is expected to promote the use of collaborative business models by making regulation less burdensome and enabling market access. Another example is the guidance issued by the Ministry of Economic Affairs and Employment for short-term rented accommodation. It covers income and value-added tax declaration obligations for providers, minimum safety and insurance requirements, and collection of users' identity information and thus increases legal certainty and transparency.

Box 4.4.1: Investment challenges

Macroeconomic perspective

Real investment suffered significantly in the 2008-09 recession when investment fell so that it was the largest individual demand component contributing to the fall in real GDP (see Graph 1.1). This reflects, in part, the deterioration of the economic outlook but also the fact that the years 2007-08 before the crisis witnessed an investment boom in Finland. After a brief rebound in 2010-11, investment fell in 2012-2014, when investment in production facilities and commercial investment as well as research and development expenditure (or intangible investment) of non-financial corporations declined. In addition, real housing investment declined while public investment increased slightly. However, in 2015 real investment turned to a tepid growth driven by machinery and equipment investment by the corporate sector. Also housing construction started to grow. In 2016 machinery and equipment investment and construction were expected to have continued to expand. However, the growth has started to increase from very low levels. In real terms, investment was in 2015 still below the levels in 2009-2010. The investment-to-GDP ratio is currently subdued and close to one fifth, a few percentage points lower than in 2006.

Assessment of barriers to investment and ongoing reforms

Table 1: **Barriers to investment**

Public administration/ Business environment			Labour market/ Education			Sector specific regulation		
	Regulatory/ administrative burden	CSR		EPL & framework for labour contracts			Business services / Regulated professions	
	Public administration	CSR		Wages & wage setting	CSR		Retail	CSR
	Public procurement /PPPs			Education			Construction	
	Judicial system		Financial Sector / Taxation	Taxation			Digital Economy / Telecom	
	Insolvency framework			Access to finance			Energy	
	Competition and regulatory framework		R&D&I	Cooperation btw academia, research and business			Transport	
				Financing of R&D&I				

	No barrier to investment identified		Not assessed yet		Some progress
CSR	Investment barriers that are also subject to a CSR		No progress		Substantial progress
			Limited progress		Fully addressed

Source: European Commission

Finland has preserved a good environment for doing business and cost-competitivenss is expected to improve as of 2017. The new wage-setting practices in line with the Competitiveness Pact are under discussion between the social partners (see Section 4.3). The government is working on improving the business environment further.

1/ The main barriers to investment are the cumulated loss of cost competitiveness and continued challenges in non-cost competitiveness. The Competitiveness Pact (see Box 1.1) is expected to lower wage costs for employees creating possibilities to take on economically feasible investment projects. Non-cost competitiveness issues such as declining economic activity in key export markets and shift of demand from products made in Finland to competitors' more innovative products are limiting production. This in turn is slowing down investment in production capacity. In this regard cuts to public and private R&D spending are unfortunate and could result in lower capacity to create new innovative export products in the future.

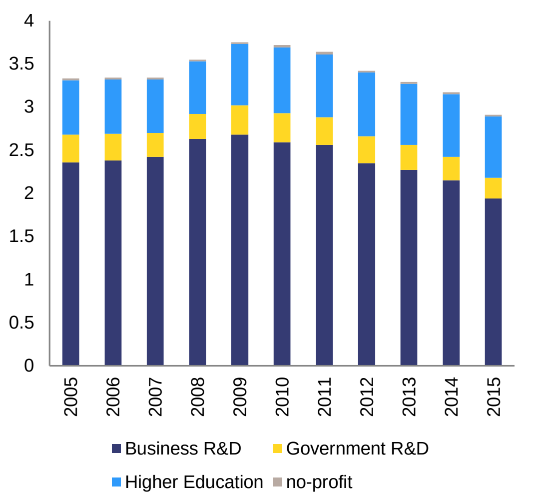
2/ Overall, the business environment could be more favourable for foreign and domestic investment. The government has pledged to reduce regulatory burden, also in services such as retail, to make the economy more flexible and the business environment more attractive (see Section 4.4.3). The government programme Team Finland on one hand supports growth of innovative start-ups and helps them to internationalise and on the other hand promotes Finland as location for foreign investment.

4.5. SECTORAL POLICIES

4.5.1. RESEARCH, DEVELOPMENT AND INNOVATION

Since cost competitiveness is improving thanks to the recent wage agreements, non-cost competitiveness issues become even more important. Retaking the path towards sustainable growth and renewed competitiveness will require a clear focus on research and innovation which should increase business dynamism and help to renew the structure of the economy. While Finland's total R&D budget (2.9 % GDP in 2015, projected to marginally decline in 2016) is still among the highest in the world, it has decreased by 15 % in 2009- 2014. The decline was mainly caused by lower investments in the private sector which can be linked to economic restructuring. The share of manufacturing in total value-added has decreased from 25.3 % in 2007 to 17.0 % in 2015. The share of high-tech manufacturing has decreased from 7.3 % in 2007 to 3.0 % in 2015.

Graph 4.5.1: **Total intramural R&D expenditure (GERD) by sectors of performance in Finland between 2005 and 2014**



Source: European Commission

Public R&D intensity remained almost stable over the period 2007-2014 with a counter-cyclical expansion in expenditure during the crisis years. In 2015 public R&D intensity dropped below 1%, bringing it back to the pre-crisis levels due to the government's fiscal consolidation programme. Based on the 2016 budget, research and innovation expenditure decreased 9.4 % in comparison to 2015. Among the areas most concerned by the cuts are the R&D subsidies to businesses-driven research, mainly those distributed by the Tekes agency. No evaluations that would demonstrate the impact and appropriateness of cuts in the programmes and other Tekes activities have been made.

In international comparison, subsidies towards R&D have been moderate. Direct government funding of business R&D as a percentage of GDP amounted to only 0.06 % in 2014 (OECDd). Subsidies are replaced by soft loans to businesses, so that these could become commercially successful on a global level. The government is also experimenting with new programmes in growth areas such as clean technology, biotechnology and digitalisation, but these are on a relatively small-scale.

In the 2016 European Innovation Scoreboard, Finland remains an innovation leader. Its innovation performance has, however, decreased since 2010. Its performance has deteriorated based on a number of indicators, notably innovative SMEs collaborating with others, non-R&D innovation expenditures and venture capital. Nevertheless, Finland still has clear strengths in international scientific co-publications, licence and patent revenues from abroad, patent applications and public-private co-publications.

Some of the resources put into public research do not lead to high quality results. In terms of highly cited publications (share of these in total publications of the country), Finland only ranked 11th in the EU. Public-private cooperation also shows a worrying declining trend, with the amount of public R&D expenditure financed by business declining from 0.08 % of GDP in 2007 to 0.05 % GDP in 2014.

The choices made by the government in the fiscal consolidation process have led to relatively higher funding of fundamental research. Encouraging the commercialisation of research output also features prominently on the policy agenda. The streamlining of profiles and the division of labour between higher education and research institutes is also a policy priority. In 2017 further changes are planned to the funding model for universities. Part of the institutional funding of universities has already been re-allocated to the Academy of Finland to facilitate strategic choices.

Universities have been pursuing the commercialisation of research output. This has been achieved through the creation of spin-offs and by significant investment into the innovation capacity of the start-up ecosystem. However, the share of high-growth enterprises categorised as innovative is slightly lower than the EU average. Also in terms of the average size of high-growth businesses measured in employment, Finland falls behind the EU average (Costa et al 2016).

The government's programme for 2015-19 focuses research and innovation policy strongly on university-business collaboration and the creation of an efficient national research system. While the budgetary restrictions have a distortionary impact on the research and innovation ecosystem which needs to be thoroughly assessed, the risk taking by the government on policy experimentation is remarkably progressive and forward-looking. Yet, the lack of justification for budgetary cuts and limited cooperation with the main stakeholders can be assessed as posing a threat to the success of reforms.

4.5.2. COMPETITION IN PRODUCT AND SERVICE MARKETS

The concentration of the grocery retail market remains very high. ([37]) Although the third largest retailer has increased its market share, the dominance of the two leading local retailers has not significantly changed and is still very high — also as a result of the acquisition of Suomen Lähikauppa by Kesko, the second largest retailer in the country.

Consumer prices have fallen but remain high. Fierce price competition between the retail chains has recently led to a continuous fall in prices of daily consumer goods, as reported by the Ministry of Finance in its Economic Survey for autumn 2016 (VM, 2016a). The Eurostat price level index for food and non-alcoholic beverages has dropped, moving Finland slightly closer to the EU average but the prices for these product categories still remain the fourth highest in the EU (Eurostat, 2015).

Retail trade has been highly regulated but recently steps towards lowering the regulation have been taken. After liberalising the opening hours from the start of 2016, the proposed amendments to the Land Use and Building Act increase the threshold of retail establishments to be classified as 'large' from 2000 to 4000 m^2. This should provide more flexibility for retailers in adapting their store formats to the needs of consumers. However, it is necessary to ensure that the changes are correctly implemented at the local level, given the fact that planning powers were recently entirely conferred on municipalities. In addition, the government is planning to liberalise alcohol policy. The proposal is expected to bring a certain share of sales from state-owned Alko shops to the other retailers and reduce the dependence of other retailers on the location decisions of Alko shops.

The taxi sector is to be reformed. As part of the first stage of the unified Transport Code (cf. 4.5.4), the government has presented proposals to facilitate market entry in the taxi sector, enable new business models, and remove national regulation limiting competition. In particular, the current quotas on taxis by geographical zone of operation are proposed to be abolished in order to facilitate access to markets, expansion of operations and more efficient use of vehicles. Similarly, taxi transport licences would no longer require having followed a transport operator course and at least six months experience of driving taxis. Instead of being issued for specific vehicles as is currently the case, they would be operator-specific and available to operators holding passenger or goods transport licences and fulfilling taxi transport requirements. This change is intended to make it easier to enter the taxi market and develop new services and business models. Moreover, the regulation of taxi fares would be replaced by a system of flexibly set fares, communicated to customers before the start of the journey; provisions to determine maximum fares are however expected to remain in place. Finally, the formal requirements on taxi drivers are proposed be eased and a wider definition of what vehicles can be used to provide taxi services is envisaged.

([37]) Euromonitor (2016). The five largest grocery retailers hold 95 % of the Finnish market, with the two market leaders accounting for nearly 80 %.

Changes to the regulation and roles of both hospital and private pharmacies are being discussed, related to the reform of social and healthcare services. The private pharmacy sector is strictly regulated, including limitations on the number of branches per pharmacy (up to three branches per private pharmacy; the Helsinki university pharmacy is however allowed to operate up to 16 branches) and the ownership of the pharmacies. There has been a public debate about reform of the pharmacy sector, however a political decision has not been made to change the fundamentals of the system. The government has conducted a public consultation on the rules governing transfer of ownership of pharmacies as well as the retail sale of non-pharmaceutical products in pharmacies.

4.5.3. ENERGY, RESOURCES AND CLIMATE CHANGE

Finland is broadly on track to reach its Europe 2020 energy targets, but to ensure fulfilment of the climate target additional measures appear to be required. The share of renewable energy in gross final energy consumption reached 39.5 % in 2015, already exceeding its 2020 target. In addition, primary and final energy consumption in 2015 were already below their 2020 energy efficiency targets. The promotion of renewable energy and energy efficiency is also a way of reducing dependency on imported energy. Regarding greenhouse gas emissions, according to the national projections, the reduction in emissions in the non-ETS sector by 2020 is exactly 16 % (same as its commitment), implying that, unless it adopts new policies, it is not certain that the target will be met.

The government approved a new national energy and climate strategy to 2030 on 24 November 2016. The strategy has been submitted as a Government report to the parliament. The strategy sets out concrete measures and goals to reach the energy and climate goals for 2030, with the aim of aligning the strategy to the overall EU objectives. Such goals include increasing the share of renewable energy above 50 % in the 2020s, promoting the use of advanced biofuels, and encouraging transport electrification. The government's proposal is meant to promote cost-effective measures to reduce greenhouse gas emissions. However, some uncertainties remain regarding the adequacy between the envisaged policy measures, notably for wind power, and the government's objectives. Public finance implications have been assessed. According to government estimates, public support required by the strategy would increase central government expenditure by approximately 160–240 million euros in 2018-2020 and by 930 million euros during 2021 to 2030. Energy related tax revenue would decrease by ca 1.4 billion euros over the strategy's horizon as energy use decreases.

The electricity market is working well. Concentration on the power generation market is low. There is also a widespread deployment of smart meters, and high annual switching rates by consumers from one electricity supplier to another. Finland is an electricity importer and lacks sufficient interconnector capacity to the Nordic and Baltic neighbours, especially Sweden. The wholesale price of electricity remains higher than in the other Nordic countries. Ways to address this problem include the improvement of interconnection capacity, development of additional generation capacity and promoting energy efficiency. The latter is important as the energy intensity of the economy is well above EU average and progress has been limited over the last 10 years. High energy intensity can be partly explained by climatic and structural factors (energy intensive pulp and paper sector). Regarding additional generation capacity, potential delays have been announced in the completion of the new nuclear power plant project Olkiluoto-3.

Competition in the gas market is currently lacking. The market is tightly regulated as there is no liberalised wholesale market and end-users have no choice of supplier. The situation is meant to improve thanks to the building of new external gas connections. The Connecting Europe Facility's financing agreement on the Balticconnector pipeline project has ensured agreement for the construction of this gas pipeline linking Finland and Estonia. Together with the construction of small-scale liquefied natural gas projects, this will enable the diversification of gas providers. A first local LNG terminal, aimed mainly for ships and local industry, was opened in 2016 in the port of Pori. On that basis, amendments to the Natural Gas Market Act are now under preparation. The new Act is expected to open up wholesale and retail markets to competition and improve the competitiveness of natural gas by reducing rules applying to natural gas companies.

4.5.4. OTHER NETWORK INDUSTRIES

Reform of the domestic postal services has been initiated. Linked to the government's digitalisation and better regulation agenda, the Ministry of Transport and Communications has initiated a two-stage project to reform legislation governing postal services. The goal is to make postal services more flexible and better adapted to the needs of the changing business environment (LVM, 2016a).

Transport market regulations will be reformed through the introduction of a unified regulatory act (Transport Code). The reform will be implemented in three stages. The first stage includes provisions on road transport and better interaction between all modes of transport. Later stages include provisions on air, sea and rail transport markets as well as on transportation services. The first phase of the reform is intended to enter into force on 1 July 2018 to enable the transport sector to prepare for the new rules. The Transport Code envisages that essential data on transport services are made open, laying down provisions for the interoperability of ticket and payment systems. This is expected to facilitate combinations of different transport services (LVM, 2016b).

4.6. PUBLIC ADMINISTRATION

4.6.1. REGULATORY FRAMEWORK

Finland's regulatory environment is transparent but at times costly for the businesses. Costs affected by the regulation are in particular significant for start-ups and SMEs. Larger companies are generally coping with the excessive regulation better and in some cases even see it as a competitive advantage that keeps the new entrants out of market.

The 'think small first' principle, which aims at making policy and legislative initiatives SME-friendly, is not systematically applied to new and existing legislation. At the same time SMEs are a specific focus group in many new initiatives. Moreover, entrepreneurs consider frequent changes in legislation as a problem (Prime Minister's Office, 2016b). More focus should also be put on facilitating small businesses' compliance with rules and regulations. In specific areas, decreased public spending, together with structural changes in the provision of public services (towards larger units) make it difficult for SMEs to participate in public procurement tenders.

The government has set up an independent Council of Regulatory Impact Analysis in order to improve the quality of impact assessments accompanying government proposals. The current members are appointed for three years until 2019. The Council has already started to produce opinions, among others on the draft amendments to the Land Use and Building Act (cf. 4.5.2) and the Postal Act (cf. 4.5.4), as well as on a proposed new tax deduction for entrepreneurs (VM, 2016b).

4.6.2. EFFICIENCY OF PUBLIC ADMINISTRATION

The public administration is efficient. Studies point to Finland as an efficient and low corruption country. Efficiency of public administration has not been demonstrated as a factor hampering investment or employment decisions. Nevertheless, there is some room for improvement.

Among the key projects of the government is the digitalisation of public services. The first step is the development of the common principles for all digital public services. Also, all internal processes within the government are to be digitalised. The funding in 2016-18 is expected to amount to 100 million euros.

The government has stated its intention to abolish detailed qualification requirements for municipal staff. The aim is to focus recruitment policies more towards skills and competencies than formal qualification requirements. Municipal positions involving the exercise of public authority will be the exception as there will be specific legislation on qualification requirements. Abolishing detailed qualification requirements in most cases to focus more on skills and competencies is part of a plan to cut costs by 1 billion euros in municipalities (OKM, 2015).

Public procurement functions well in Finland. All notifications are published electronically. Electronic auctioning is used in less than 1 % of all contract award notices. Public procurement contracts are in most cases awarded on the basis of quality and value for money, not based on the lowest price (the latter is used in 46 % of contracts, lower than the EEA average of 64 %). However, Commission data indicate that transparency is an issue as contract award notices are not always published.

The public procurement system could do with faster review procedures. Review procedures at the Market Court are relatively time-consuming, the average time for a review decision being eight months. In most other EU Member States, review bodies deliver their decisions within one to three months.

ANNEX A
Overview Table

Commitments **Summary assessment([38])**

2016 Country-specific recommendations (CSRs)	
CSR 1: Achieve an annual fiscal adjustment of at least 0,5 % of GDP towards the medium-term budgetary objective in 2016 and 0,6 % in 2017. Use any windfall gains to accelerate the reduction of the general government debt ratio. Ensure timely adoption and implementation of the administrative reform with a view to better cost-effectiveness of social and healthcare services.	Finland has made **some progress** is addressing the CSR 1 (this overall evaluation excludes an assessment of compliance with the Stability and Growth Pact).
Achieve an annual fiscal adjustment of at least 0,5 % of GDP towards the medium-term budgetary objective in 2016 and 0,6 % in 2017. Use any windfall gains to accelerate the reduction of the general government debt ratio.	The compliance assessment with the Stability and Growth Pact will be included in Spring when final data for 2016 will be available.
Ensure timely adoption and implementation of the administrative reform with a view to better cost-effectiveness of social and healthcare services.	• **Some progress** has been made on the adoption and implementation of the social and healthcare reform. The reform has been undertaken in order to ensure the continued access to the good quality services while ensuring the long-term sustainability of public finances. The government has prepared the first half of the draft legislation that is needed for the reform to take effect from 2019. The 27 draft laws have undergone a public consultation. Legislation regarding the freedom of choice for the citizens was not part

([38]) The following categories are used to assess progress in implementing the 2016 country-specific recommendations:
No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. Below a number of non-exhaustive typical situations that could be covered under this, to be interpreted on a case by case basis taking into account country-specific conditions:
• no legal, administrative, or budgetary measures have been announced in the National Reform Programme or in other official communication to the national Parliament / relevant parliamentary committees, the European Commission, or announced in public (e.g. in a press statement, information on government's website);
• no non-legislative acts have been presented by the governing or legislator body;
• the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures that would need to be taken (unless the CSR explicitly asks for orientations or exploratory actions), while clearly-specified measure(s) to address the CSR has not been proposed.
Limited progress: The Member State has:
• announced certain measures but these only address the CSR to a limited extent;
and/or
• presented legislative acts in the governing or legislator body but these have not been adopted yet and substantial non-legislative further work is needed before the CSR will be implemented;
• presented non-legislative acts, yet with no further follow-up in terms of implementation which is needed to address the CSR.
Some progress: The Member State has adopted measures that partly address the CSR
and/or
the Member State has adopted measures that address the CSR, but a fair amount of work is still needed to fully address the CSR as only a few of the adopted measures have been implemented. For instance: adopted by national parliament; by ministerial decision; but no implementing decisions are in place.
Substantial progress: The Member State has adopted measures that go a long way in addressing the CSR and most of which have been implemented.
Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

	of the public consultation. The work needs to continue, but thanks to the timely preparation of the legislation creating the new administrative structure, it can be concluded that there is some progress in implementing the recommendation.
CSR 2: While respecting the role of social partners, ensure that the wage setting system enhances local wage bargaining and removes rigidities, contributing to competitiveness and a more export industry-led approach. Increase incentives to accept work and ensure targeted and sufficient active labour market measures, including for people with a migrant background. Take measures to reduce regional and skills mismatches. While respecting the role of social partners, ensure that the wage setting system enhances local wage bargaining and removes rigidities, contributing to competitiveness and a more export industry-led approach. Increase incentives to accept work and ensure targeted and sufficient active labour market measures, including for people with a migrant background.	Finland has made **some progress** in addressing the CSR 2: **Substantial progress** has been made in ensuring that the wage-setting system enhances local wage bargaining and removes rigidities, contributing to competitiveness and a more export industry-led approach. The social partners agreed on the Competitiveness Pact, which also extends the possibilities for local bargaining. A new wage-setting model is being negotiated for the next round of wage negotiations, where wages in the tradable sector serve as an anchor for the rest of the economy. The extent to which there will be results from the extended local bargaining possibilities remains to be seen. **Some progress** has been achieved on incentives to accept work and ensure targeted and sufficient active labour market measures, including for people with a migrant background. To increase incentives to accept work among parents of young children, the government has proposed in the 2017 budget the reduction of fees for early childhood education. From the benefits side, Finland has tightened the obligation to accept a job offer and the obligation to participate in activation schemes. The duration of earnings-related unemployment insurance was reduced by one fifth to 400 days. From 2017, mandatory interviews with all the unemployed will be carried out at three-month intervals to monitor progress with the individual employment plans. The government has also introduced additional

	funding for migrants' integration and a new measure offering immigrants training that will support their employability.
Take measures to reduce regional and skills mismatches.	**Some progress** has been achieved in the area of reducing regional and skills mismatches. The reform of the vocational education system, expected to be finalised in 2018 includes making it more responsive to labour market needs. The rules regarding acceptable commuting distance for jobseekers will be stricter and the unemployment benefit can be used as a mobility allowance.
CSR 3: Continue pursuing efforts to increase competition in services, including in retail. Promote entrepreneurship and investment, including by reducing administrative and regulatory burden, to foster growth of high value added production.	Finland has made **some progress** in addressing the CSR 3:
Continue pursuing efforts to increase competition in services, including in retail.	**Some progress** has been made on competition in services, including retail. Establishment conditions for retail outlets will be eased. The proposed legislation increases the minimum surface of the more tightly regulated large retail units from 2 000 to 4 000 square meters. The possibilities to establish these units in areas other than the city centres will be increased and access to outlets will become a more important factor in the planning than the outlet's nature and size. Transport and gas market reforms have been announced and the draft legislation prepared.
Promote entrepreneurship and investment, including by reducing administrative and regulatory burden, to foster growth of high value added production.	• **Some progress** has been made on the promotion of entrepreneurship and investment and fostering growth of high value added production. In order to promote entrepreneurship, the government put forward a subsidy (grant or a wage subsidy) for one-person companies to hire a worker, reviewed the rules that guide the recruitment of foreign specialists and the creation of a public database of inventions that everyone can access and exploit. An innovation voucher for SMEs is in preparation, aimed at promoting the use of outside expertise in innovating and improving products or services. The

	government also plans to combine the existing public support instruments into a single 'growth service'.
Europe 2020 (national targets and progress)	
Employment rate (%):78 %	The employment rate was 73.3 % in 2013 and declined to 73.1 % in 2014 and further declined to 72.9 % in 2015. The ambitious target on the employment rate will be difficult to meet, especially considering the continuous negative trend.
Research and development target: 4% of GDP	2.9 % (2015) No progress towards the target. Public R&D intensity has remained almost stable over the period 2007-2014 with a counter-cyclical expansion in expenditure during the crisis years. In 2015 public R&D intensity dropped below 1%, bringing it back to the pre-crisis levels. Private expenditure on R&D as share of GDP decreased from 2.42 % in 2007 to 1.94 % in 2015. Finland is unlikely to reach its national target for 2020 as expenditure is still decreasing.
Early school leaving target: 8 %	The early school leaving rate increased from 9.3 % in 2013 to 9.5 % in 2014, but declined to 9.2 % in 2015. It was below the EU average value of 11.0 % in 2015. There are significant gender differences (rate is higher for boys).
Tertiary education target: 42 %	Finland's tertiary educational attainment rate was 45.5 % in 2015 compared with a figure of 45.3 % in 2014 and 45.1 % in 2013, when measured according to the EU definition of the indicator.
Target for reducing the population at risk of poverty or social exclusion: 150 000 (compared to 910 000 in 2008)	The number of people at risk of poverty and social exclusion in 2015 was 904 000, compared with 927 000 in 2014. As the number of people at risk of poverty has remained close to 900 000 over the last decade, it will be challenging to meet the target by 2020.

2020 Renewable energy target: 38 %	The share of renewable energy in gross final energy consumption reached 39.5% in 2015([39]), already exceeding the 2020 target. The contribution of heating and cooling, with almost a 52% RES-share for that sector, is significant.
Energy efficiency target. Finland has set and indicative national energy efficiency target of 310 TWh, which implies reaching a 2020 level of 35.9 Mtoe primary consumption and 26.7 Mtoe final energy consumption.	Finland reduced its primary energy consumption by -4.6% from 33.57 Mtoe in 2014 to 32.03 Mtoe in 2015. Final energy consumption decreased by -1.3% from 24.5 Mtoe in 2014 to 24.18 Mtoe in 2015. Even if Finland has already achieved levels of primary and final energy consumption which are below the indicative national 2020 targets (35.9 Mtoe in primary energy consumption and 26.7 Mtoe in final energy consumption) it would need to make an effort to keep these levels until 2020.
Greenhouse gas emissions target 2020: -16% in 2020 compared to 2005 (in non-ETS sectors)	**2020 target**: -16 % According to the latest national projections and taking into account existing measures, the target is expected to be achieved with no margin: -16 % in 2020 compared to 2005. **Non-ETS 2015 target:** -9 %. Based on proxy data, the non-ETS greenhouse gas emissions between 2005 and 2015 decreased by 11 %; which means 2 pps below the 2015 target set by the Effort Sharing Decision.

([39]) Renewable energy shares for 2015 are approximations and not official data, reflecting the available data (04.10.2016). See the Öko-Institut Report: Study on Technical Assistance in Realisation of the 2016 Report on Renewable Energy, http://ec.europa.eu/energy/en/studies

ANNEX B
MIP Scoreboard

Table B.1: **The MIP Scoreboard for Finland**

			Thresholds	2010	2011	2012	2013	2014	2015
External imbalances and competitiveness	Current account balance, (% of GDP)	3 year average	-4%/6%	1.8	0.5	-0.8	-1.8	-1.6	-1.0
	Net international investment position (% of GDP)		-35%	16.5	15.1	11.7	3.9	-2.6	0.6
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	-1.2	-2.8	-8.2	0.1	2.6	2.3
	Export market share - % of world exports	5 years % change	-6%	-19.3	-23.3	-30.8	-30.8	-25.1	-20.5
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	13.2	9.4	6.0	9.1	7.9	3.6
Internal imbalances	Deflated house prices (% y-o-y change)		6%	4.8	0.0	-0.4	-1.3	-1.8	-0.4
	Private sector credit flow as % of GDP, consolidated		14%	7.3	3.6	7.4	2.8	0.8	9.5
	Private sector debt as % of GDP, consolidated		133%	148.9	145.4	148.6	147.7	147.4	155.7
	General government sector debt as % of GDP		60%	47.1	48.5	53.9	56.5	60.2	63.6
	Unemployment rate	3 year average	10%	7.7	8.1	8.0	7.9	8.2	8.8
	Total financial sector liabilities (% y-o-y change)		16.5%	9.2	28.4	-0.6	-11.8	8.8	1.5
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)		-0.2%	-1.1	-1.1	0.2	0.7	0.5	0.6
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	0.5	0.5	0.2	-0.3	0.2	0.7
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	4.9	3.6	-2.5	-1.5	0.4	3.4

Flags: p: provisional.

Source: European Commission, Eurostat and Directorate General for Economic and Financial Affairs (for Real Effective Exchange Rate), and International Monetary Fund

ANNEX C
Standard Tables

Table C.1: **Financial market indicators**

	2011	2012	2013	2014	2015	2016
Total assets of the banking sector (% of GDP)	327.3	300.5	258.3	282.1	265.9	277.3
Share of assets of the five largest banks (% of total assets)	80.9	79.0	84.1	79.8	75.0	-
Foreign ownership of banking system (% of total assets)	70.3	66.6	64.4	66.8	61.9	-
Financial soundness indicators:1)						
- non-performing loans (% of total loans)	0.8	0.8	0.7	1.4	1.3	1.3
- capital adequacy ratio (%)	14.4	17.2	16.3	17.5	23.8	23.6
- return on equity (%)2)	7.6	8.9	8.1	9.1	8.3	4.2
Bank loans to the private sector (year-on-year % change)	8.5	7.1	6.3	3.8	0.2	0.7
Lending for house purchase (year-on-year % change)	6.6	5.6	2.3	1.7	2.5	2.3
Loan to deposit ratio	142.3	139.9	139.2	139.6	136.7	139.8
Central Bank liquidity as % of liabilities	1.0	1.3	1.1	0.4	0.3	1.2
Private debt (% of GDP)	145.4	148.6	147.7	147.4	155.7	-
Gross external debt (% of GDP)1) - public	41.8	47.8	45.9	53.9	52.1	51.6
- private	43.4	43.7	43.7	43.9	48.5	44.3
Long-term interest rate spread versus Bund (basis points)*	39.8	39.1	29.2	28.6	22.4	28.1
Credit default swap spreads for sovereign securities (5-year)*	49.2	56.4	25.1	24.0	20.6	24.4

Notes:
1) Latest data Q2 2016.
2) Quarterly values are not annualised
* Measured in basis points.

Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Labour market and social indicators**

	2011	2012	2013	2014	2015	2016 [4]
Employment rate (% of population aged 20-64)	73.8	74.0	73.3	73.1	72.9	73.5
Employment growth (% change from previous year)	1.3	0.9	-0.7	-0.5	-0.4	0.5
Employment rate of women (% of female population aged 20-64)	71.9	72.5	71.9	72.1	71.8	71.8
Employment rate of men (% of male population aged 20-64)	75.6	75.5	74.7	74.0	73.9	75.1
Employment rate of older workers (% of population aged 55-64)	57.0	58.2	58.5	59.1	60.0	61.4
Part-time employment (% of total employment, aged 15-64)	14.1	14.1	14.0	14.1	14.1	15.0
Fixed-term employment (% of employees with a fixed term contract, aged 15-64)	15.5	15.5	15.3	15.4	15.1	15.9
Transitions from temporary to permanent employment	28.7	30.9	34.5	28.0	23.9	:
Unemployment rate[1] (% active population, age group 15-74)	7.8	7.7	8.2	8.7	9.4	8.9
Long-term unemployment rate[2] (% of labour force)	1.7	1.6	1.7	1.9	2.3	2.3
Youth unemployment rate (% active population aged 15-24)	20.1	19.0	19.9	20.5	22.4	20.5
Youth NEET[3] rate (% of population aged 15-24)	8.4	8.6	9.3	10.2	10.6	:
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	9.8	8.9	9.3	9.5	9.2	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	46.0	45.8	45.1	45.3	45.5	:
Formal childcare (30 hours or over; % of population aged less than 3 years)	20.0	22.0	21.0	23.0	:	:

Notes:
1) The unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within 2 weeks.
2) Long-term unemployed are those who have been unemployed for at least 12 months.
3) Not in education employment or training.
4) Average of first three quarters of 2016. Data for total unemployment and youth unemployment rates are seasonally adjusted.

Sources: Sources:
European Commission (EU Labour Force Survey).

Table C.3: **Labour market and social indicators (continued)**

Expenditure on social protection benefits (% of GDP)	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Sickness/healthcare	7.2	7.2	7.4	7.5	7.5	:
Disability	3.4	3.3	3.4	3.4	3.4	:
Old age and survivors	11.2	11.2	11.9	12.5	13.0	:
Family/children	3.2	3.1	3.2	3.3	3.2	:
Unemployment	2.3	2.0	2.0	2.3	2.6	:
Housing	0.5	0.5	0.5	0.6	0.6	:
Social exclusion n.e.c.	0.8	0.8	0.9	0.9	0.9	:
Total	28.5	28.1	29.3	30.3	31.1	:
of which: means-tested benefits	1.2	1.3	1.5	1.6	1.8	:
Social inclusion indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
People at risk of poverty or social exclusion[1] (% of total population)	16.9	17.9	17.2	16.0	17.3	16.8
Children at risk of poverty or social exclusion (% of people aged 0-17)	14.2	16.1	14.9	13.0	15.6	14.9
At-risk-of-poverty rate[2] (% of total population)	13.1	13.7	13.2	11.8	12.8	12.4
Severe material deprivation rate[3] (% of total population)	2.8	3.2	2.9	2.5	2.8	2.2
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	9.3	10.0	9.3	9.0	10.0	10.8
In-work at-risk-of-poverty rate (% of persons employed)	3.7	3.9	3.8	3.7	3.7	3.5
Impact of social transfers (excluding pensions) on reducing poverty	51.5	50.0	50.9	55.3	53.6	53.7
Poverty thresholds, expressed in national currency at constant prices[5]	11940	12005	12082	12009	11965	11852
Gross disposable income (households; growth %)	4.0	4.3	2.9	2.9	0.6	1.4
Inequality of income distribution (S80/S20 income quintile share ratio)	3.6	3.7	3.7	3.6	3.6	3.6
GINI coefficient before taxes and transfers	47.7	48.4	48.2	48.5	49.1	49.2
GINI coefficient after taxes and transfers	25.3	25.8	25.9	25.4	25.6	25.2

Notes:
1) People at risk of poverty or social exclusion : individuals who are at risk of poverty and/or suffering from severe material deprivation and/or living in households with zero or very low work intensity.
2) At-risk-of-poverty rate : proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.
3) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.
4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.
5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices = 100 in 2006 (2007 survey refers to 2006 incomes)

Sources: Sources:
For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table C.4: **Product market performance and policy indicators**

Performance indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Labour productivity (real, per person employed, year-on-year % change)						
Labour productivity in industry	9.61	-2.11	-8.02	4.69	2.68	-1.26
Labour productivity in construction	5.73	-1.22	-4.34	0.38	-2.21	0.54
Labour productivity in market services	3.18	3.99	1.20	-1.93	-0.38	0.84
Unit labour costs (ULC) (whole economy, year-on-year % change)						
ULC in industry	-9.53	4.65	11.11	-2.85	-0.68	3.59
ULC in construction	-5.32	4.75	8.12	2.98	2.33	1.26
ULC in market services	-1.02	1.31	2.12	4.58	0.91	0.34
Business environment	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Time needed to enforce contracts[1] (days)	375.0	375.0	375.0	375.0	375.0	375.0
Time needed to start a business[1] (days)	14.0	14.0	14.0	14.0	14.0	14.0
Outcome of applications by SMEs for bank loans[2]	0.31	0.06	0.23	0.41	0.57	0.23
Research and innovation	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
R&D intensity	3.73	3.64	3.42	3.29	3.17	2.90
Total public expenditure on education as % of GDP, for all levels of education combined	6.85	6.76	7.12	7.16	na	na
Number of science & technology people employed as % of total employment	49	49	50	51	52	52
Population having completed tertiary education[3]	32	33	33	34	35	36
Young people with upper secondary education[4]	84	85	86	86	86	87
Trade balance of high technology products as % of GDP	-0.33	-0.74	-0.87	-1.02	-0.98	-1.22
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)[5], overall				na	1.34	1.29
OECD PMR[5], retail				2.86	2.89	2.86
OECD PMR[5], professional services				0.61	0.71	0.62
OECD PMR[5], network industries[6]				2.72	2.61	2.47

Notes:
1) The methodologies, including the assumptions, for this indicator are shown in detail at : http://www.doingbusiness.org/methodology.
2) Average of the answer to question Q7B_a. '[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?'. Answers were scored as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or if the outcome is not known.
3) Percentage population aged 15-64 having completed tertiary education.
4) Percentage population aged 20-24 having attained at least upper secondary education.
5) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail at : http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
6) Aggregate OECD indicators of regulation in energy, transport and communications.

Sources: Sources:
European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

Green growth performance		2010	2011	2012	2013	2014	2015
Macroeconomic							
Energy intensity	kgoe / €	0.20	0.19	0.18	0.18	0.19	0.18
Carbon intensity	kg / €	0.44	0.39	0.36	0.37	0.35	-
Resource intensity (reciprocal of resource productivity)	kg / €	1.08	1.06	1.03	1.07	0.99	0.98
Waste intensity	kg / €	0.61	-	0.53	-	0.56	-
Energy balance of trade	% GDP	-2.8	-3.8	-2.6	-2.5	-2.4	-
Weighting of energy in HICP	%	7.57	7.52	8.37	8.12	7.84	7.63
Difference between energy price change and inflation	%	8.6	17.2	-3.2	-1.6	-2.6	-2.3
Real unit of energy cost	% of value added	14.0	16.9	17.2	16.7	15.8	-
Ratio of environmental taxes to labour taxes	ratio	0.13	0.14	0.13	0.13	0.13	-
Environmental taxes	% GDP	2.7	3.0	3.0	2.9	2.9	-
Sectoral							
Industry energy intensity	kgoe / €	0.29	0.29	0.30	0.30	0.30	0.31
Real unit energy cost for manufacturing industry excl. refining	% of value added	18.3	19.8	22.7	21.8	21.8	-
Share of energy-intensive industries in the economy	% GDP	11.40	11.63	11.52	11.66	11.50	11.01
Electricity prices for medium-sized industrial users	€ / kWh	0.07	0.08	0.07	0.07	0.07	0.07
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.04	0.05	0.05	0.05	0.04
Public R&D for energy	% GDP	0.11	0.10	0.08	0.08	0.08	0.08
Public R&D for environmental protection	% GDP	0.02	0.02	0.02	0.01	0.01	0.01
Municipal waste recycling rate	%	32.8	34.8	33.3	32.5	32.5	40.6
Share of GHG emissions covered by ETS*	%	55.5	52.7	48.5	49.9	48.8	45.8
Transport energy intensity	kgoe / €	0.64	0.61	0.59	0.59	0.60	0.62
Transport carbon intensity	kg / €	1.67	1.55	1.48	1.48	1.40	-
Security of energy supply							
Energy import dependency	%	47.8	52.8	46.3	48.6	48.9	46.8
Aggregated supplier concentration index	HHI	72.2	80.0	68.0	68.3	67.5	-
Diversification of energy mix	HHI	0.21	0.21	0.21	0.21	0.22	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 prices)
Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)
Carbon intensity: greenhouse gas emissions (in kg CO2 equivalents) divided by GDP (in EUR)
Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)
Waste intensity: waste (in kg) divided by GDP (in EUR)
Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP
Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP
Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)
Real unit energy cost: real energy costs as a percentage of total value added for the economy
Environmental taxes over labour taxes and GDP: from European Commission's database, 'Taxation trends in the European Union'
Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)
Real unit energy costs for manufacturing industry excluding refining : real costs as a percentage of value added for manufacturing sectors
Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP
Electricity and gas prices for medium-sized industrial users: consumption band 500–20 00MWh and 10 000–100 000 GJ; figures excl. VAT.
Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP
Proportion of GHG emissions covered by EU Emissions Trading System (ETS) (excluding aviation): based on greenhouse gas emissions
(excl land use, land use change and forestry) as reported by Member States to the European Environment Agency.
Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)
Transport carbon intensity: GHG emissions in transport activity divided by gross value added of the transport sector
Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels
Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.
Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels
* European Commission and European Environment Agency

Source: Source:
European Commission (Eurostat) unless indicated otherwise

REFERENCES

Ali-Yrkkö J, Rouvinen P, Sinko P and Tuhkuri J (2016) Finland in Global Value Chains. Prime Minister's Office publications 12/2016

Andersen, Torben M. and Svarer, Michael, Business cycle contingent unemployment insurance, in Nordic Economic Policy Review, 1/2011

Bergholm, Tapio & Bieler, Andreas (2013) Globalization and the erosion of the Nordic model: A Swedish–Finnish comparison

Borg A, Vartiainen J (2015) Strategia Suomelle. Valtioneuvoston kanslian julkaisusarja 5/2015.

Bouget D, Frazer H, Marlier E, Sabato S and Vanhercke B (2015): Social Investment in Europe: A study of national policies. Brussels: European Commission

Calmfors, Lars, Wages and wage-bargaining institutions in the EMU – a survey of the issues, 2001

Calmfors, Lars and Driffill, John (1988) Bargaining Structure, Corporatism and Macroeconomic Performance in Economic Policy

City of Helsinki (2016). Preparatory education,

Costa P., Ribeiro A., Van der Zee F., Deschryvere M. (2016), Framework conditions for High Growth Innovative Enterprises, European Commission, Luxembourg

Danthine, Jean-Pierre and Hunt, Jennifer, Wage Bargaining Structure, Employment and Economic Integration, Economic Journal, 1994

Economic Policy Council (2016) Talouspolitiikan arviointineuvoston lausunto vuoden 2017 budjettiesityksestä.

ECB (2016), Survey on the Access to Finance of Enterprises, June 2016

Elinkeinoelämän Keskusliitto (EK), EK selvitti: Kiky vei paikallista sopimista eteenpäin (2016) (http://ek.fi/ajankohtaista/tiedotteet/2016/06/07/ek-selvitti-kiky-vei-paikallista-sopimista-eteenpain/)

Employment and Social Developments in Europe 2015 http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7859&furtherPubs=yes

EUA (2016), Public Funding Observatory 2016

European Commission (2014) Macroeconomic Imbalances Finland 2014. European Economy, Occasional papers 177.

European Commission-EPC, 2016. Joint Report on Health Care and Long-Term Care Systems and Fiscal Sustainability. Volume 2 – Country documents. Brussels;

European Commission (2016a), Education and Training Monitor 2016 — Volume 2, Finland, Publications Office of the European Union, Luxembourg.

European Commission (2016b), Europe's Digital Progress Report,

European Commission (2016c), Country Report Finland 2016, European Commission (2017), Debt Sustainability Monitor 2016, Institutional Paper 047, January 2017

European Commission, European Investment Bank, European Investment Fund (2016), The Investment Plan for Europe: state of play September 2016

European Job Mobility Laboratory, 2011, Partnerships among Employment Services

Eurostat (2015), Comparative price levels for food, beverages and tobacco

FVCA (2016) Venture Capital and Private Equity Industry in Finland 2015. Finnish Venture Capital Association

Hansson P, and Lundberg L (1991) Näringsstruktur, strukturomvandling och produktivitet. In Internationalisering och produktivitet. Expertrapport nr 8 till Produktivitetsdelegationen.

Kajanoja L (2012) Suomen kilpailukyky ja sen mittaaminen. Euro ja talous 5/2012 Bank of Finland.

Kangas, Olli, Ideasta kokeiluun? - Esiselvitys perustulokokeilun toteuttamisvaihtoehdoista, 2016: (http://tietokayttoon.fi/julkaisu?pubid=10601)

Kela, Tilastollinen vuosikirja, 2015

Kiss, A. & Vandeplas, A. (European Commission) Measuring Skills Mismatch - Analytical Webnote, 2015 http://ec.europa.eu/social/BlobServlet?docId=14974

Kotamäki, Mauri & Kärkkäinen, Olli, Työllisyys kasvaa, työnteko vähenee? Työnteon kannustimet ja suojaosareformin vaikutus, Finnish Labour Review 4/2014

Kröger, Mähönen, Klemetti, Nieminen, Paikallinen sopiminen – uhasta mahdollisuudeksi, in Finnish Labour Review 2/2016

Lehto E (2016) Laskelmia kilpailukykysopimuksen vaikutuksista. PT-blogi 6.4.2016. http://www.labour.fi/ptblogi/2016/04/06/laskelmia-kilpailukykysopimuksen-vaikutuksista/

LVM (2016a), Ministry of Transport and Communications: press release 01.08.2016

LVM (2016b), Ministry of Transport and Communications: press release 22.09.2016

Melbourne Mercer Global Pension Index (2016). http://www.globalpensionindex.com/

Ministry of Finance (2016) Pika-arvio kilpailukykysopimuksen vaikutuksista. Memo. http://valtioneuvosto.fi/documents/10623/1985149/Valtiovarainministeriön+arvio+työmarkkinajäjestöjen+neuvottelutuloksen+vaikutuksista+29.2.2016/

Ministry of Economic Affairs and Employment 2016a, Employment Bulletin, September 2016: http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/75581/TKAT_Syys_2016.pdf?sequence=1

Ministry of Economic Affairs and Employment 2016b, Työllisyyspaketti -työryhmän esitykset, Ministry of Economic Affairs and Employment publications 33/2016

Ministry of Economic Affairs and Employment 2016c, Työ- ja elinkeinoministeriön lyhyen aikavälin työmarkkinaennuste, syksy 2016

Ministry of Education and Culture (2015), Tomorrow's comprehensive school

Ministry of Social Affairs and Health http://stm.fi/en/frontpage

Määttänen N and Ropponen O, Listaamattomien osakeyhtiöiden verotus, voitonjako ja investoinnit. ETLA reports Nr 40 12/2014

Närvi, Johanna, Äidit kotona ja työssä – perhevapaavalinnat, työtilanteet ja hoivaihanteet, 2014: http://www.julkari.fi/bitstream/handle/10024/116920/narvi.pdf?sequence=1

Obstbaum, Meri and Vanhala, Juuso, Paikallinen Sopiminen in Kansantaloudellinen aikakauskirja, 2/2016

OECD (2013), Programme for International Student Assessment (PISA) 2012

OECD (2016a) Economic Surveys – Finland, January 2016;

OECD (2016b), Back to Work: Finland: Improving the Re-employment Prospects of Displaced Workers, OECD Publishing, Paris

OECD (2016c), Education at a Glance 2016. OECD Indicators

OECD (2016d), Financing SMEs and entrepreneurs 2017: an OECD scoreboard

OECD (2016e), The Walking Dead? Zombie Firms and Productivity Performance in OECD Countries

OECD (2016f), R&D Tax Incentive Indicators, July 2016.

OKM (2015), Ministry of Education and Culture: National action plan / Finland

Pitkänen, Sari – Mertala, Sirpa - Ala-Kauhaluoma, Mika, TE-palveluissa vahvistettava kokeiluista kumppanuuksiin perustuvaa monikanavaisuutta ja yhteiskehittämistä, 1/2016, in Finnish Labour Review, http://tem.fi/tyopoliittinen-aikakauskirja

Prime Minister's Office (2016), Hallituksen esitys Eduskunnan vuoden 2016 toiseksi lisätalousarvioksi, 2016, https://www.eduskunta.fi/FI/vaski/HallituksenEsitys/Documents/HE_88+2016.pdf.

Prime Minister's Office (2016a), Action plan for the implementation of the key project and reforms defined in the Strategic Government Programme

Prime Minister's Office (2016b), Growth drivers and bottlenecks of start-up companies, Publications of the Government's analysis, assessment and research activities 30/2016

Prime Minister's Office (2017) Business taxation, investments and productivity

Richardson, Linda, Costs of Childcare Across OECD Countries, 2012 (http://www.ifs.org.uk/docs/OECD%20countries_Richardson.pdf)

SOSTE, Lausunto Eduskunnan työelämä- ja tasa-arvovaliokunnassa, 11.11.2016

The Social Situation Monitor (SSM), Making Work Pay", 2016, http://ec.europa.eu/social/BlobServlet?docId=16330&langId=en

TEM (2016), Ministry of Economic Affairs and Employment: press releases

Thévenon, O. and Solaz, A. (2013), “Labour Market Effects of Parental Leave Policies in OECD Countries”, OECD Social, Employment and Migration Working Papers, No. 141, OECD Publishing

Uusitalo R (1999) Miten kävi hallitun rakennemuutoksen? VATT-Discussion Papers 206. Government Institute for Economic Research.

Valtioneuvoston kanslia, Tuloverotuksen vaikutus työn tarjontaan, 2015, http://vnk.fi/documents/10616/2009122/5_Tuloverotuksen+vaikutus+ty%C3%B6n+tarjontaan.pdf/1d8539b5-f354-4f31-93cf-9a70a6b32c37?version=1.0

Viitamäki, Heikki, Työnteon kannustimet, mitä jää käteen?, VATT, 2015

VM (2016a), Ministry of Finance: Economic survey, Autumn 2016

VM (2016b), Ministry of Finance: Budget review 2017

Yrittäjät (2016a), Pk-yritysbarometri 2/2016 (Federation of Finnish Enterprises, Finnvera, Ministry of Economic Affairs and Employment)

Yrittäjät (2016b), Syksyn 2016 Pk-yritysbarometri (Federation of Finnish Enterprises, Finnvera, Ministry of Economic Affairs and Employment)