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Assessment of the 2014 national reform programme and stability programme for FINLAND

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on Finland's 2014 national reform programme and delivering a Council opinion on Finland's 2014 stability programme

{COM(2014) 427 final}

CONTENTS

EXECUTIVE SUMMARY

Finland is emerging from a recession that has lasted for two years. The mild recovery forecast for 2014-15 is conditional on the improving external demand situation, as domestic demand remains weak. Real GDP growth is forecast to be 0.2 % in 2014 and unemployment is expected to keep rising. Industrial restructuring is continuing and the economy is re-orienting itself towards service sectors. The ageing of its population has implications for Finland's work-force and its public finances.

Overall, Finland has made some progress in addressing the 2013 country-specific recommendations. It is in the process of translating an ambitious reform agenda into concrete policy measures. The reform agenda was proposed in August 2013 and encompasses measures to balance public finances, reform the pension system, improve the labour market, and boost growth. In March 2014, ambitious consolidation measures were announced for the 2015 budget, together with stimulus measures to be financed by the sale of government-owned assets. However, not all of the reforms announced have been described in detail yet or channelled into legislative proposals, so it is difficult to draw conclusions as to the success of those reforms. The government has recognised the fiscal sustainability gap and has proposed comprehensive measures to deal with the problem. A pension reform is scheduled for 2017, meaning that the legislative package needs to be ready by the end of 2015. Social partners have been entrusted with the task of preparing the details of the reform. The direction of the reform has been outlined in a comprehensive report by an expert group. Substantial progress has been made on the fiscal framework, as new legislation has provided the central government with additional powers to control fiscal policy targets of local governments and the sub-sectors of social security funds. These reforms are reflected also in the National Reform Programme, which provides information also on the progress towards the Europe 2020 targets.

Remaining challenges are mainly related to improving productivity, growth, and competitiveness. Moreover Finland needs to fully utilise its potential labour supply to counterbalance the effects of population ageing.

- **Competitiveness**: Finland's exports have lost significant market share over the last decade. The structural change in the industry sector needs to be facilitated to enable the creation and growth of new enterprises in order to fill the void being created by the decline of the electronics and forestry sectors. Finland's research and development potential needs to be fully harnessed by companies producing marketable goods and services.
- **Labour market**: Long-term labour supply is still the key labour market challenge, as the number of people leaving the labour market is now higher than the number entering. As a result, it is increasingly important to include as many available workers as possible to the labour market. Careers need to be extended, and youth and long-term unemployment needs to be addressed. In particular, it would appear possible to better involve older and low-skilled workers in the labour market by providing incentives to work, improving working conditions, and providing targeted measures to increase their participation in lifelong learning programmes.

- **Sustainability of public finances:** Finland's debt to GDP ratio is now approaching the 60 % level and is expected to exceed this in 2015. In the short term, deficits are set to remain below 3 % of GDP and the structural deficit to remain close to the medium-term objective. In the medium and long term, ageing-related costs will weigh on the budget. The efficiency of public services has not kept pace with productivity developments in the private sector.
- **Competition needs to be further improved on the domestic market in the sectors shielded from external competitions.** Retail trade is dominated by few players and the prices of non-tradable services are high, which has a detrimental effect on, competitiveness.

1. INTRODUCTION

In May 2013, the Commission proposed a set of country-specific recommendations (CSRs) for economic and structural reform policies for Finland. On the basis of these recommendations, the Council of the European Union adopted five CSRs in the form of a Council Recommendation in July 2013. These CSRs concerned public finances, administrative reform, labour market, competition and competitiveness. This staff working document (SWD) assesses the state of implementation of these recommendations in Finland.

The SWD assesses policy measures in light of the findings of the Commission's 2014 Annual Growth Survey (AGS)[1], and the third annual Alert Mechanism Report (AMR),[2] which were published in November 2013.

The AGS sets out the Commission's proposals for building the necessary common understanding of the priorities for action at national and EU level in 2014. It identifies five priorities to guide Member States to renewed growth: pursuing differentiated, growth-friendly fiscal consolidation; restoring normal lending to the economy; promoting growth and competitiveness for today and tomorrow; tackling unemployment and the social consequences of the crisis; and modernising public administration. The AMR serves as an initial screening device to determine whether macroeconomic imbalances exist or risk emerging in Member States. The AMR found positive signs that macroeconomic imbalances in Europe are being corrected. To ensure that a complete and durable rebalancing is achieved, Finland and 15 other Member States were selected for a review of developments in the accumulation and unwinding of imbalances. These in-depth reviews were published on 5 March 2014 along with a Commission Communication.[3]

In light of the 2013 Council Recommendation, the AGS, the AMR and the in-depth review, Finland presented a national reform programme (NRP) and a stability programme on 17 April 2014. These programmes provide detailed information on progress made since July 2013 and on the government's future plans. The information included in these programmes provides the basis for the assessment made in this staff working document.

The programmes have undergone a consultation process involving the national parliament and stakeholders.

2. ECONOMIC SITUATION AND OUTLOOK

Economic situation

In 2013 and early 2014, growth and employment in Finland were strongly affected by continued weakness in the euro area and ongoing structural changes in the economy. In 2013, Finland's economy was in recession for the second year. Real GDP dropped 1.4 % after having decreased by 1 % in 2012. The decline in GDP was broad-based, affecting consumer spending, exports and particularly investments. Net external demand had a positive effect on growth due to the strong decline in imports. This partly offset the negative effect of the strong decline in domestic demand. Unemployment continued to climb gradually, ending the year at

[1] COM(2013) 800 final.
[2] COM(2013) 790 final.
[3] Apart from the 16 Member States identified in the AMR, Ireland was also covered by an in-depth review, following the conclusion by the Council that it should be fully integrated into the normal surveillance framework after the successful completion of its financial assistance programme.

8.2 %, a level last recorded in 2010 when the economy was just recovering from the 2009 crisis. The general government deficit was -2.1%.

Economic outlook

Economic activity started improving in the middle of 2013 but declined again in the last quarter. Leading indicators still do not point to a recovery in domestic demand in the first half of 2014. An improving economic outlook for Finland's main export markets indicates an export-driven recovery in 2014. In the Commission 2014 spring forecast growth is projected to remain tepid in 2014, reaching 0.2 % for the year as a whole, before increasing to 1.0 % in 2015.

Moderate wage growth and persistent unemployment are affecting disposable income, limiting the growth of private consumption. Gross fixed capital formation is forecast to pick up only gradually as equipment investment is held back by low capacity utilisation, and the limited number of building permits indicates sluggish construction activity for 2014. Supply conditions continue to be influenced by industrial restructuring. New products and services in sectors such as chemicals and metals are gradually replacing lost production in ICT and the paper industry.

Exports are forecast to increase over 2014-15, even though Finland is projected to lose further export market share. The moderate wage agreement is a first step in restoring cost competitiveness. In turn, weak domestic demand will limit imports, generating a positive growth contribution from net exports. Consequently, it is expected that the current account balance will continue to improve.

Risks to the economic outlook are balanced and relate mainly to developments in export markets. Of these, risks related to the situation on the Russian market are most prominent. Risks arising from financial market conditions appear limited and funding costs remain low.

The stability programme and the NRP share the same underlying macroeconomic outlook, based on the Finland's Ministry of Finance March forecast. The forecast does not differ substantially from the Commission's forecast for 2014 and 2015, although the economic growth is forecast to be somewhat higher in both years. The programmes do not include a quantified macro impact of the structural reforms.

3. CHALLENGES AND ASSESSMENT OF POLICY AGENDA

3.1. Fiscal policy and taxation

Budgetary developments and debt dynamics

The objective of the stability programme is to stay at or above the MTO and reducing the general government deficit from -2.1% of GDP in 2013 to -1.1% in 2015. Finland's Medium Term Objective (MTO) is a structural deficit of -0.5%, this remains unchanged from last year's programme and it is in line with the objectives of the Stability and Growth Pact.

Although the general government deficit is planned to start diminishing later than previously foreseen, the deficit is now expected to decline faster. Finland's general government deficit was 2.1% of GDP in 2013[4]. In the stability programme in April 2013, the deficit was planned to be 1.9%. For the current year, the government balance is forecast to

[4] In the stability programme, the general government balance in 2013 is 2.0%. This was the information available at the cut-off date of the underlying forecast. In the EDP notification, Finland's deficit is 2.1% in 2013.

stay broadly stable at -2.0% of GDP in the Stability Programme. The central government budget for 2014, adopted in December 2013, was in line with the Draft Budgetary Plan (DBP). The budget was not modified after the Commission issued an opinion highlighting the risk of a significant deviation from the requirements of the preventive arm of the Stability and Growth Pact during the DBP assessment. The deficit in 2014 is planned to be -2.0%, higher compared to the deficit planned in the 2013 Stability Programme, where an improvement to -1.3% of GDP was foreseen for 2014. In the 2013 DBP, the deficit was planned to reach -1.9% of GDP in 2014.

Although the Commission 2014 spring forecast predicts lower economic growth for 2014 and 2015 than the stability programme, the forecasts on revenues and expenditures are similar. In both the Commission spring forecast and the national forecast economic growth is driven by the net exports. Consumption and investments are expected to remain weak in 2014 and recover only in 2015. For 2014, the Commission spring forecast expects revenues to be marginally lower and expenditure higher than in the stability programme. Partly the difference is due to different growth forecast, and the Commission forecast uses more updated data regarding the revenues and expenditures in 2013. The difference for expenditure is largely due to the expected developments in the compensation of public employees where the stability programme foresees a larger decrease than the Commission forecast.

According to the programme, the general government balance is set to stabilise and improve over the programme horizon. In 2014, it is foreseen that the deficit will be the same as in 2013, while from 2015 onwards the deficit is expected to decline, reaching a surplus of 0.3% of GDP in 2018. The expected improvement is envisaged to be front-loaded, with an improvement of 0.9% of GDP in 2015 while being smaller thereafter. According to the previous programme, the deficit was planned to be stable in 2013 and a gradual improvement was set to start already from 2014. As real GDP growth was 1.9 pps. lower for 2013 than forecast in the 2013 stability programme, the deficit target was not achieved. As a result, the nominal deficit increased in 2013 while the structural deficit improved.

Box 1. Main measures

Main budgetary measures

Revenue	Expenditure
2013	
• Measures increasing the central government tax revenue (+0.7% of GDP)	• Central government expenditure cuts (-0.2% of GDP)
2014	
• Measures increasing the central government tax revenue (+0.7% of GDP)	• Central government expenditure cuts (-0.5% of GDP)
2015	
• Measures increasing the central government tax revenue (+1.1% of GDP)	• Central government expenditure cuts (-1.6% of GDP)
2016	
• Measures increasing the central government tax revenue (+1.4% of GDP)	• Central government expenditure cuts (-1.6% of GDP)
2017	
• Measures increasing the central government tax revenue (+1.4% of GDP).	• Central government expenditure cuts (-1.8% of GDP)
Note: The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of this measure.	

The current programme sets a more ambitious target for the deficit reduction as from 2015 than the 2013 programme. Previously, the deficit was seen to be -0.5% of GDP in 2017, while in the new programme public finances are expected to be balanced by 2017. The reason for the improvement in 2015 is the consolidation measures decided in March 2014. The government decided on numerous specific measures regarding fiscal consolidation that are taken into account in the stability programme. The measures announced are clearly defined and the announcement is credible, taking the form of official guidance for the ministries for the preparation of the draft budgets for 2015. Measures in the structural policy programme have a less direct impact in 2014 and 2015 but will have a significant influence in the medium to long term.

The deficit reduction is envisaged to be achieved by revenue increases and expenditure control. General government revenues are expected to increase from 56.0% of GDP to 57.3%

by 2017 and expenditure is planned to be reduced from 58.1% of GDP to 57.3%. The planned revenue increase is based mainly on increasing revenues from taxes on income and wealth. On the expenditure side, the emphasis is on the reduction of the compensation of employees (as share of GDP) and gross fixed capital formation. The role of one-off measures is not significant.

Risks to the attainment of the programme target are mainly related to the macroeconomic outlook. The Commission 2014 spring forecast expects 0.3 pp. lower growth in 2014 and 0.4 pp lower growth in 2015. Risks to growth relate mostly to the external developments. Main downside risks are developments in Russia, which is among Finland's most important trading partners.

Finland's recalculated structural balance[5] was at the MTO in 2013 and no adjustment would be required in 2014. However, according to the programme, Finland would deviate from the MTO in 2014 by -0.2 pp, ending the year with a structural balance of -0.7% of GDP. Due to a large output gap, the preventive arm allows for Finland to undertaken an adjustment of less than the benchmark 0.5pp of GDP in 2015 – the minimum requirement is therefore a tightening of 0.1% in 2015. However the programme plans to achieve an improvement of 0.4 pp, which is above the 0.2 pp it would take to reach the MTO. Consequently, Finland would achieve the MTO in 2015 with a small margin for possible adverse developments. From 2016 onwards, Finland plans to over-achieve the MTO. According to the information provided in the stability programme, the growth rate of government expenditure, net of discretionary revenue measures, in 2014 will not exceed the reference medium-term rate of potential GDP growth of 0.78%. The growth rate of government expenditure, net of discretionary revenue measures, in 2015 is expected to contribute to an annual structural adjustment towards the MTO by 0.3% of GDP. This is because the growth rate of these expenditures is below 0.6%, the applied lower reference rate under the expenditure benchmark.[6]

The Commission forecast regarding the structural balance is similar to the projections in the stability programme and similar results are obtained regarding the compliance with the MTO and expenditure benchmark. The Commission's recalculations of the data presented in the programme lead to the same conclusions.

Box 2. Finland's status vis-à-vis the Stability and Growth Pact

Finland is subject to the preventive arm of the Pact and is at its Medium Term Objective in 2013. It is not expected to reach its Medium Term Objective in 2014 but plans to return to the Medium Term Objective in 2015 and to stay at this over the rest of the programme horizon. Therefore, it should preserve a sound fiscal position which ensures compliance with the Medium Term Objective.

The stability programme data and the Commission 2014 spring forecast lead to the conclusion that only in 2014 there is a risk of a deviation from the MTO. While during the assessment of the Draft Budgetary Plans for 2014, the Commission 2013 Autumn Forecast suggested that there was a risk of a significant deviation, the magnitude of possible deviation

[5] Cyclically adjusted balance net of one-off and temporary measures, recalculated by the Commission services on the basis of the information provided in the programme, using the commonly agreed methodology.

[6] This lower rate has been calibrated in line with the requirements of the structural balance. In the case of Finland, it has been calibrated to be equivalent to a 0.1% of GDP tightening on the structural balance, reflecting Finland's starting debt of below 60% and its large output gap.

now appears lower. Finland also appears in compliance with the expenditure benchmark in 2014.

Following an overall assessment of Finland's budgetary plans, with the structural balance as a reference, including an analysis of expenditure net of discretionary revenue measures, the adjustment path towards the MTO seems to be appropriate in 2013 and 2015. A non-significant deviation from the adjustment path towards the MTO is to be expected in 2014, but taking into account the budgetary measures announced for 2015, it is expected to be fully corrected in the following year.

Finland's gross debt ratio is on an upward path, but growing slower than forecast in the previous stability programme and in the DBP. According to the programme, the debt to GDP ratio will grow from 57% of GDP in 2013 to 61.4% in 2016 and then slowly start to decline. Difficult economic conditions – as evidenced by a large output gap – play a key role in this increase in debt. In addition, social security sector surpluses are not used to pay down central government and local government debt, thus the stock-flow adjustments appear to be driving the increase of debt. However, with the expected reduction of the central government deficit through the 2014 March consolidation measures, the decrease in debt growth seems realistic and is in line with the Commission forecast. As according to the plans the government debt to GDP ratio will breach the reference value of 60% in 2015, the Commission prepares a report under Article 126(3) TFEU analysing whether or not Finland is compliant with the debt criterion of the Treaty.

Fiscal framework

In 2013, Finland did not receive a CSR on addressing the fiscal framework. Nevertheless, Finland has implemented measures to improve the fiscal framework; in particular it ratified the Fiscal Compact at the end of 2012 and has transposed the structural budget balance rule into national law[7] and made specific arrangements for its implementation in the secondary legislation[8]. Finland's fiscal framework is currently tied to multiannual expenditure ceilings. The framework is linked to parliamentary terms, and experience with the framework suggests that the government broadly abides by the rules. Every year, the government sets limits on central government spending for the remaining years of its term, defining the multiannual financial framework. Successive yearly decisions on annual ceilings are taken on the basis of this framework. In February 2014, the fiscal framework was further strengthened by a decision to allow central government to also plan and monitor expenditure in local government and social security funds sub-sectors.

Spending limit decisions are taken in late March each year, setting annual limits on government expenditure for the next four years. However, neither balanced (nominal) budget requirements nor limits on annual deficits are present in the legislation. This policy provides an ambitious target to control the costs of the budget while attempting to maintain enough flexibility to respond to changes in the economic environment. The framework

[7] The main instrument which implements the provisions of the Fiscal Compact is the Act on implementation of the Treaty and the budget framework directive (No 869/2012 Laki talous- ja rahaliiton vakaudesta, yhteensovittamisesta sekä ohjauksesta ja hallinnasta tehdyn sopimuksen lainsäädännön alaan kuuluvien määräysten voimaansaattamisesta ja sopimuksen soveltamisesta sekä julkisen talouden monivuotisia kehyksiä koskevista vaatimuksista).

[8] On 14th February 2014 a Government Decree (No 120/2014) entered into force. It obliges the Government to adopt on a yearly basis a medium term fiscal plan consistent with the medium term objective (MTO) based on an independent economic forecast and an assessment of the budgetary situation.

includes built-in automatic stabilisers, as some expenditure falls outside the scope of the limits. However, there seems to be limited flexibility to react to the challenges arising over the course of a year. If a growth forecast is revised significantly downwards during the year, there is no process to adjust the expenditure limits accordingly. This was the case in 2013, when an expenditure ceiling decision was taken based on the expectation of GDP increasing by 1.6 % in 2014. The GDP forecast was subsequently revised downwards significantly, but no changes were made to the expenditure ceiling decision.

The National Audit Office has been entrusted with the responsibilities of Fiscal Council while the Ministry of Finance remains responsible for forecasting. The Fiscal Council monitors the fiscal rules, most importantly compliance with the medium-term budgetary objective, but it is not giving an opinion regarding the macroeconomic forecast underlying the stability programme or the draft budgetary plan. The macroeconomic forecast underpinning the Stability Programme has been prepared by the Ministry of Finance. To implement the EU directive on budgetary frameworks and the EU regulation on the monitoring of draft budgetary plans, which requires the independence of the forecast, a Ministry of Finance working group has proposed amendments to existing legislation[9] to ensure also the formal independency of forecasting tasks in Ministry of Finance, but the amendments are currently not adopted.

Long-term sustainability

Finland appears to face medium fiscal sustainability risks in the medium term. The medium-term sustainability gap[10], showing the adjustment effort up to 2020 required to bring debt ratios to 60% of GDP in 2030, is at 2.1% of GDP, primarily related to the projected ageing costs being equivalent to 2.3 pp. of GDP until 2030. In the long term, Finland appears to face high fiscal sustainability risks, primarily related to projected ageing costs being equivalent to 4.7 pp. of GDP over the very long run. The long-term sustainability gap[11] shows the adjustment effort needed to ensure that the debt-to-GDP ratio is not on an ever-increasing path, is at 6.0 % of GDP. Risks would be lower in the event of the structural primary balance

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9 See, http://www.vm.fi/vm/en/04_publications_and_documents/01_publications/_01_budgets/_20131218Budjet/ vm_budjetti_enkku_korjattu.pdf

10 See Table V in Annex. The medium-term sustainability gap (S1) indicator shows the upfront adjustment effort required, in terms of a steady improvement in the structural primary balance to be introduced until 2020, and then sustained for a decade, to bring debt ratios back to 60% of GDP in 2030, including financing for any additional expenditure until the target date, arising from an ageing population. The following thresholds were used to assess the scale of the sustainability challenge: (i) if the S1 value is less than zero, the country is assigned low risk; (ii) if a structural adjustment in the primary balance of up to 0.5 p.p. of GDP per year until 2020 after the last year covered by the autumn 2013 forecast (year 2015) is required(indicating an cumulated adjustment of 2.5 pp.), it is assigned medium risk; and, (iii) if it is greater than 2.5 (meaning a structural adjustment of more than 0.5 p.p. of GDP per year is necessary), it is assigned high risk.

11 See Table V in Annex. The long-term sustainability gap (S2) indicator shows the immediate and permanent adjustment required to satisfy an inter-temporal budgetary constraint, including the costs of ageing. The S2 indicator has two components: i) the initial budgetary position (IBP) which gives the gap to the debt stabilising primary balance; and ii) the additional adjustment required due to the costs of ageing. The main assumption used in the derivation of S2 is that in an infinite horizon, the growth in the debt ratio is bounded by the interest rate differential (i.e. the difference between the nominal interest and the real growth rates); thereby not necessarily implying that the debt ratio will fall below the EU Treaty 60% debt threshold. The following thresholds for the S2 indicator were used: (i) if the value of S2 is lower than 2, the country is assigned low risk; (ii) if it is between 2 and 6, it is assigned medium risk; and, (iii) if it is greater than 6, it is assigned high risk.

reverting to higher values observed in the past, such as the average for the period 2004-13. It is therefore appropriate for Finland to maintain sufficient primary surpluses and to further contain age-related expenditure[12] growth to contribute to the sustainability of public finances in the medium and long term.

In 2013, Finland received a recommendation to ensure the cost-effectiveness and sustainability of long-term care and put a stronger focus on prevention, rehabilitation and independent living. The analysis in this SWD leads to the conclusion that Finland has made substantial progress on measures taken to address this recommendation (for the full CSR assessment see the overview table in Section 4). The recommendation was based on the results of the 2012 Ageing Report that predicted significant increases in long-term care costs. New legislation[13] on social and health services for older people, with a stronger focus on prevention, rehabilitation, independent living and home care, as well as on improving care coordination, entered into force in July 2013. This is an ambitious, credible and relevant measure that should help to reduce the need for institutional care and to contain the future costs of long-term care, as according to the 2014 national reform programme, it has already resulted in revised quality recommendations and an action plan aimed at reducing the institutional care for the elderly. The need to reduce institutional care is also recognised in the structural policy programme, where a specific target is set for reducing the expenditure on institutional care.

Finland has recognised the sustainability gap and produced a structural policy programme aimed at closing the gap. The policy programme aims at increasing the labour input and potential growth of the economy, but addresses also areas such as long-term care and pension reform (discussed in greater detail in the following section).

Tax system

In 2013 Finland had one of the highest tax burdens among Member States, with a structure oriented towards direct taxes, especially personal income tax. To support consolidation efforts and the achievement of Europe 2020 environmental targets, Finland's tax system could be designed to be more growth and environmental friendly.

In 2013, Finland did not receive a CSR regarding the tax system. Nevertheless, Finland has undertaken reforms in this area, mainly fine-tuning the tax rates in order to lower the taxation of low incomes and to increase the taxation of high incomes. From 2014, the corporate income tax is reduced, but dividend taxation somewhat increased. In 2014 and 2015, Finland continues to increase various consumption taxes.

The government programme, agreed in 2011 between the parties in the current coalition, provides for the introduction of consolidation measures that put equal weight on tax increases and expenditure cuts. In practice, the bias has been more towards tax increases. This is due to cuts in transfers to municipalities, which the central government counts as expenditure cuts but which result in municipalities increasing taxation, based on their rights and obligations. The municipalities mainly resort to the income tax to increase their revenues and municipal property taxation represents only ca 6.5% of their tax revenues. The share of revenues from recurrent taxes on immovable property in 2012 amounted to 0.7 % of GDP (EU average: 1.5 %). In March 2014 additional flexibility to increase property

[12] Ageing costs comprise long-term projections of public age-related expenditure on pension, health care, long-term care, education and unemployment benefits. See the 2012 Ageing Report for details.

[13] Act on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older Persons.

taxes was provided to the municipalities. There is an on-going evaluation of the taxable property values. Taxes levied to the homeowners are increasing as the mortgage interest deductibility has gradually been reduced over recent years. In 2014, the deduction is limited to 75 % of the mortgage interest paid and the deductible part continues to be reduced by 5 percentage points annually until it is limited to 50%. This is expected to reduce the debt bias in housing taxation.

In 2012, environmental tax revenues accounted for 7 % of all revenues but some aspects of environmental taxation could be reviewed in order to broaden the tax base and increase revenues, and contribute to moving towards the emission target for sectors not subject to emission trading system. Revenues from environmental taxes in Finland are higher than the EU average as a proportion of GDP (FI: 3.1 %, EU: 2.4 % in 2012). The reduction of environmentally harmful subsidies is a key area underlined in the AGS 2014. Finland is still subsidising, through advantageous tax schemes, some industries and activities, although the same objectives could be achieved in a less environmentally harmful way. Finland would benefit from reducing the harmful subsidies, as this would mitigate negative impacts on the environment and deliver economic benefits such as additional revenues and the release of funds to support the transition towards a resource-efficient and low-carbon economy, also reducing the risks linked to potential energy price increases. This could provide incentives for eco-innovation and boost the competitiveness of businesses. The structural policy programme addresses these issues and a study on environmentally harmful subsidies was published by the Ministry of Environment in 2013[14].

3.2. Financial sector

The financial sector continues to operate well relative to many other national financial sectors in the euro area. The banking sector did not need government support during the crisis. The level of non-performing loans has not increased and remains at a low level (0.7 %). Furthermore, the banking system has remained profitable overall with an average return on equity of around 10 %, resulting in improved solvency — the average capital adequacy ratio is around 14 %. In 2013, Finland did not receive a CSR as regards financial sector policies.

The financial sector is deeply integrated with the Nordic banking groups. Foreign banks account for about two thirds of the sector's assets. Parent bank decisions regarding, for example, accounting of derivatives or allocation of funds between branches of international banking groups can have a significant impact on the financial strength of branches operating in Finland and therefore on the domestic banking market. Consequently, cross-border cooperation between supervisors is essential to monitor the performance and stability of the groups, in particular concerning the quality of assets and liquidity. Implementation of the Banking Union will change the structure of Nordic cooperation, with the ECB becoming a host supervisor for Swedish and Danish bank subsidiaries in Finland.

Finland's challenges include the promotion of enterprise growth and internationalisation also through capital provision. The availability of venture capital in Finland has generally been good,[15] but access to growth capital has been seen as one of the factors limiting growth opportunities. To address this, the government is implementing its decision to increase the availability of venture capital, in particular through fund-of-funds investments. An amount of €230 million has been allocated for 2014-17 to leverage private

[14] http://www.ym.fi/download/noname/%7BB3E047CC-DD7A-4897-BA56-513FBDC50C5F%7D/40297

[15] Enterprise Finance Index, Sub-index on access to equity finance 2012: http://ec.europa.eu/enterprise/policies/finance/data/enterprise-finance-index/sme-access-to-finance-index/index_en.htm.

equity funding — partly with asymmetric profit-sharing. According to the 2014 national reform programme, nearly €300 million has been invested through the Vigo accelerator programme, with less than a quarter of public funding. To avoid excluding private investors, the government does not seek to cover more than 10 % of the venture capital market. There is a tax incentive for business angels for 2013-15, although in 2013 it does not seem to have increased the investment amount. Government venture capital activities are still divided between three organisations, which increase administrative costs and the danger of overlaps. Taken together, the actions aimed at promoting growth finance mean that funding problems have been addressed but it remains to be seen whether this is enough to stimulate firm growth.

3.3. Labour market[16], education and social policies

The Finnish labour market performed relatively well during the crisis — but there are pressing demographic challenges. The number of people leaving the labour force each year exceeds the number entering. In view of the ageing population, it is important to bring the full labour force potential to the labour market. Labour market shortages exist already now in some occupations. To maintain the supply of labour, it is important to improve entry and prevent the early exit of workers. Lengthening working careers and tackling youth and structural unemployment remain key challenges for Finland. As regards cost-competitiveness, Finland's competitive position remains also challenging, although wage developments were moderated in 2013.

In 2013, Finland received a recommendation to take various labour market measures. In particular, it was recommended to take further steps to increase the employment rate of older workers, increasing the effective retirement age by aligning retirement age or pension benefits to changes in life expectancy and implementing the ongoing measures to improve the labour-market position of young people and the long-term unemployed, with particular focus on the development of job-relevant skills. The analysis in this document leads to the conclusion that Finland has made some progress on measures taken to address this recommendation.

Finland has made limited progress in increasing the employment rate of elderly workers. The employment rate of the 60–64 age group was only 42.9% in 2012. Despite the flexible retirement age of 63–68 years and a tripling of the accrual rate after the age of 63, the number of people retiring in 2012 on a statutory earnings-related pension at 63 was almost twice as high as those who retired at 64 or 65 put together. Early exit from the labour market occurs mainly through disability or through the 'unemployment tunnel', i.e. extended unemployment benefits available for the elderly unemployed. Finland has set itself the target of raising the effective retirement age to at least 62.4 years by 2025. However, in 2012, it was 60.9 and the Finnish Centre for Pensions estimates that, based on present trends, it will only rise to 61.5 by 2025.[17]

Social partners are working on their proposal for a pension reform, to be implemented by the new government after the general election in spring 2015. The exact contents are not yet known. The expert group appointed by the social partners to help prepare the reform concluded that the reforms of recent years are insufficient to reach the target set for 2025, and that the Finnish pension system should be better adapted to the increasing life expectancy. [18] It is recognised that the life-expectancy coefficient that has already been introduced and the

[16] For further details, see the 2014 Joint Employment Report, COM(2013)801, which includes a scoreboard of key employment and social indicators.

[17] Suomen eläkejärjestelmän sopeutuminen eliniän pitenemiseen. Eläkekysymysten asiantuntijatyöryhmän raportti Eläketurvakeskus 31.10.2013

[18] *Idem.*

tripling of the accrual rate after a worker reaches the age of 63 seem to have had a limited effect on retirement practices. This is true for lower skilled workers in particular. Moreover, life expectancy is increasing faster than previously expected and if people fail to adjust by working longer, the adequacy of pensions will also drop. By contrast, linking the pensionable age to life expectancy would reconcile the sustainability and adequacy of pensions with an ageing population.

The pension reform would be the most important element in raising the effective retirement age, but it is unlikely that the target can be achieved without additional measures to improve the employability of older workers. Professional training and measures aimed at improving health, safety and the quality of working life seem to be the main areas to be developed to attain the target. Reduced work ability is among the main grounds on which 25 000 people retire annually on a disability pension. Participation of older workers in lifelong learning is significantly lower than for the overall population**.** The overall lifelong learning participation rate is the third highest in the EU (24.3 % in 2012), but for the 55-64 age group it is around 13.5 %. Social partners — together with the competent ministries, the Finnish social security institution and the Centre for Pensions — have produced a report on the employability of people with partial work ability.[19] This initiative goes in the right direction but needs implementing measures in places of work.

Some weaknesses underlie the relatively low unemployment and high employment rates in Finland. Differences in regional unemployment rates are high and the government estimates structural unemployment to be around 4.5 % in 2013. This suggests that the capacity of the labour market to adjust to the ongoing restructuring of traditional industries is limited. One of the factors behind regional differences could be large differences in housing prices between the regions, partly due to the limited availability of land in the growth regions. According to the national reform programme, this could be addressed by forcing the municipalities to offer opportunities for housing by modifying the planning regulations.

Within the labour market, there are groups where employment rate is low. This includes the low-skilled[20] and the non-EU nationals.[21] Furthermore, the share of part-time employment is low, the employment rate of people midway through their careers (24–54) has been falling[22] since 2009. Only about 20 % of the approximately 180 000 working-age people with disabilities have paid work.

In Finland, employment rates in the lower wage categories are comparatively low. This could indicate that either there is a lack of offer of such jobs, or that there are rigidities in the labour market that limit the possibilities to conclude temporary, part-time or relatively low wage contracts. While this has obvious beneficial impact for the very low in-work poverty, the lack of such jobs could mean that groups such as the low-skilled or migrants will be unable to find a job. The 'inactivity trap' is an indicator that measures the effective tax rate facing an inactive person who contemplates to take up work. The inactivity trap is high if taxes are high or if means-tested benefits are withdrawn at a high rate when taking up work. In this case, inactive persons could face low incentives to accept a job. In 2012, the effective tax rate when moving from social assistance to work at a wage level equivalent to 67% of the average wage reached 67 to 94% for one-earner families, depending on the number of children. Targeted measures to increase the incentives to work would be an opportunity to increase employment levels. From 2014, a 300-euro protected income is available for the

[19] Osatyökykyisten työllistymistä edistävien säädösmuutostarpeiden ja palvelujen arviointi, Sosiaali- ja terveysministeriön raportteja ja muistioita 2013:37

[20] 53.9% for the low-skilled v. 74.0% for the total population (20-64 age group) in 2012.

[21] 51.7 % in Finland, 56.8 % EU in 2012. (Number of non-EU nationals is half the EU-27 average).

[22] Ministry of Finance Economic Bulletin 2/2013.

unemployed – providing incentive to accept work. Further measures in the same direction appear to be necessary as also discussed in a report analysing low-wage jobs in Finland[23]. It is a cause for concern that the participation of low-skilled workers in life-long learning is even lower than for older workers: only 10.7%.

The youth unemployment rate is significantly higher than the overall unemployment rate despite measures to improve the situation. While the overall unemployment rate was 8.2 % in 2013, youth unemployment was 19.9 %. The government's structural policy programme of 2013[24] includes welcomed initiatives to improve the employment of young people by means of measures that should also extend working careers at the beginning by half a year. These initiatives cover both vocational and higher education, combining vocational upper secondary education and apprenticeship training. All in all, Finland has made substantial progress on addressing youth unemployment. The enhanced Youth Guarantee of January 2013 is an ambitious public-private-people partnership measure with shared responsibility between stakeholders. It is both well targeted and realistic but requires efficient coordination (national, regional, and local authorities, trade unions, young people and several ministries), providing additional apprenticeship places, as well as stable long-term funding to be successful.

The number of people who have been unemployed for over a year is increasing as is the number of people unemployed for over two years. Many people have given up looking for work [25] and they are likely to find it difficult to get back to work when the economy starts improving, since transition rates from long-term unemployment to employment in Finland are below the EU average.[26] This calls for targeted activation measures.[27] By November 2013, 6 000 persons had participated in a pilot project on long-term unemployment, which has been running in 65 municipalities since September 2012. While this number seems modest, the project's most important contribution may be the new service models and best practices that the municipalities can benefit from, particularly since their responsibility for supporting the long-term unemployed is being increased at a time when they are undergoing a major reform. In addition, growing customer volumes are already challenging the public employment services since the reform of 2013.

The measures on long-term and youth unemployment conform to the priorities of the 2014 Annual Growth Survey and are reaffirmed in the 2014 national reform programme. They are relevant and ambitious. As to their credibility, a permanent improvement in job-relevant skills and the labour market position of the target groups, including through vocational education and targeted activation measures, will take time and can be achieved only if the measures are fully implemented. The steps taken go in the right direction, but no breakthrough has been achieved and the underlying policy challenges remain.

In 2013, Finland received a CSR on aligning wages with productivity developments. The social partners reached a national wage agreement in October 2013 with modest wage increases until the end of 2015 at least. This is an ambitious, relevant and credible measure, also in line with the priorities of the 2014 Annual Growth Survey. It should be noted that restoring the level of unit labour costs to the level of Finland's main competitors will still take

[23] Matalapalkkatyö Suomessa, Valtioneuvoston kanslian raporttisarja 1/2013.
[24] References are to the Government Decision of 29.11.2013 on implementing the Structural Policy Programme.
[25] Ministry of Finance Economic Bulletin 2/2013.
[26] Employment and Social Developments in Europe *2013*.
[27] In 2011 the government set a target to raise the activation rate of the unemployed to over 30%. In January 2014, it was 26.4%.

time. Nevertheless, the agreement represents substantial progress in fulfilling the recommendation to align wages and productivity.

Education

The compulsory education age will rise to 17 in 2015 and the government plans to make pre-school education compulsory in Finland for 6 year olds. It remains to be seen whether raising the compulsory education age will have a positive impact on the evolution of the number of young people not in education, employment or training and early school leaving rates. Finland has fewer early school leavers than the EU on average but the rate has been stagnating for almost a decade and is clearly higher among people with a migrant background. The rate of people not in education, employment or training was 8.6 % in 2013 and increased by only 0.2 pps between 2008 and 2012.

Finland has maintained its high position in skills. The OECD adult skills survey shows that the literacy and numeracy proficiency of 16–65 year olds is one of the best in the EU.[28] In the tests of literacy and numeracy proficiency in the EU Finland had one of the lowest shares of low skilled adults. A large share of the population (more than 40%) shows high problem-solving skills in a technology rich environment. The difference in scores of young people and older adults for both literacy and numeracy is very high, with the younger generation performing much better than older people. As to the basic skills of the 15 year olds, Finland remains one of the EU's top performers based on the 2012 PISA survey, but its overall performance has deteriorated significantly compared to the previous PISA surveys,, particularly in maths. Nonetheless, Finland still combines high levels of performance with equity in education. Variations in student scores are small, i.e. high performance is possible for almost everybody, and a strong link does not exist between socio-economic background and student performance. Yet the results are much worse for pupils with (particularly first-generation) migrant backgrounds than for natives.

Recent consolidation measures with regard to public funding of education are an issue of concern. The structural policy programme decreases expenditure on education by about €300 million. This will particularly affect local authorities who are in charge of education. Possible consequences include the need to reorganise the upper-secondary school network and/or the provision of pre-school education.

Social policies

In 2013, Finland did not receive a CSR regarding social policies. Of notable issues in this field, the risk of poverty for women older than 65 is above the EU average and almost twice that for men. Both shorter working careers and the persistent gender pay gap (18.2 %, above the national target of 15 % by 2015 and the EU-27 average of 16.2 %) have a negative impact on women's income and pension earnings.[29] There are also marked differences between socio-economic groups in health and well-being — people in the lower groups have poorer health and shorter lives.[30] Although the objective of health policy since the 1980s has been to narrow health gaps, inequalities persist and have grown somewhat, despite the Health 2015 public health programme of 2001, the 2008–11 National Action Plan to Reduce Health Inequalities, and the 2012–15 National Development Programme for Social Welfare and Healthcare.

[28] OECD country PIAAC profile for Finland at http://www.oecd.org/site/piaac/country-specific-material.htm

[29] The gender pension gap was 25 % in the 65+ age group in 2009. (This latest data is from the time before the introduction of a pension guarantee in March 2011).

[30] *Kaventaja* website of the National Institute for Health and Welfare.

3.4. Structural measures promoting sustainable growth and competitiveness

Finland needs to restore growth and competitiveness, and find ways to achieve structural change and continue the diversification of its industry. Additional challenges include making a transition towards new, high value-added products and services and improved competition in product markets and services. The difficulties in the electronics, forestry and steel industries continue to be reflected in weak exports, which have not responded well to the recent increase in global economic activity. This industry structure is also reflected in lower average energy efficiency than that of many competitors. The profitability of enterprises is decreasing and turning the R&D potential into new products is a critical issue. The problem is aggravated by high prices in the domestic market. This is at least partly due to a lack of competition and decreases the competitiveness of exporters, as prices for domestic services are high. The 2014 in-depth review highlights the role of non-cost competitiveness factors in the deterioration of the trade performance. There seems to be a failure of many Finnish firms to grow and to become international players. A limited number of large exporting firms selling a narrow product range seem to be a risk factor. In 2012, 1% of firms accounted to 76% of gross exports. The Finnish companies are increasingly investing abroad while the domestic investment is sluggish and recently Finland has not been able to attract significant foreign direct investments.

Box 3: Potential impact of structural reforms – a benchmarking exercise

Structural reforms are crucial for boosting growth. It is therefore important to know the potential benefits of these reforms. Benefits of structural reforms can be assessed with the help of economic models. The Commission uses its QUEST model to determine how structural reforms in a given Member State would affect growth if the Member State narrowed its gap vis-à-vis the average of the three best EU performers on key indicators such as the degree of competition in the economy or labour market participation. Improvements on these indicators could raise Finland's GDP by about 3.1% in a 10-year period. Some reforms could have an effect even within a relatively short time horizon. The model simulations corroborate the analysis of Section 3.3, according to which the largest gains would likely stem from reducing the final goods sector mark-ups and increasing the labour market participation rates. In addition, the simulations provide rationale for increasing incentives to accept jobs by reducing the benefit replacement rate.

Table: Structural indicators, targets, and potential GDP effects[31]

Reform areas		FI	Average 3 best EU performers	GDP % relative to baseline	
				5 years	10 years
Market competition	Final goods sector markups (price-cost margin)	0.20	0.13	1.9	2.3
Market regulation	Entry costs	1.00	0.13	0.0	0.0
Tax reform	Implicit consumption tax rate	26.4	28.6	0.2	0.1
Skill enhancing reforms*	Share of high-skilled	11.0	10.7	0.0	0.0
	Share of low-skilled	15.2	7.5	0.0	0.0
Labour market reforms	Female non-participation rate (25-54ys):			0.5	0.9
	- low-skilled	32.7	26.4		
	- medium-skilled	17.6	10.5		
	- high-skilled	11.7	4.3		
	Low-skilled male non-participation rate (25-54ys)	21.4	7.7	0.0	0.1
	Elderly non-participation rate (55-64ys):			0.3	0.7
	- low-skilled	23.9	13.4		
	- medium-skilled	9.7	4.8		
	- high-skilled	5.6	3.3		
	ALMP (% of GDP over unemployment share)	21.7	37.4	0.1	0.1
	Benefit replacement rate**	71.7	52.6	0.3	0.4
Total				3.2	4.6

Source: Commission services. Note: Simulations assume that all Member States undertake reforms which close their structural gaps by half. The table shows the contribution of each reform to total GDP after five and ten years. If the country is above the benchmark for a given indicator, we do not simulate the impact of reform measures in that area; however, the Member State in question can still benefit from measures taken by other Member States.[32] *The long-run effect of increasing the share of high-skilled labour in the population could be 0.7% of GDP and of decreasing the share of low-skilled labour could be 1.8%. **EU average is set as the benchmark.

In 2013, Finland received CSRs to: enhance competition in product and service markets; deliver innovative products, services and high-growth companies in a rapidly changing environment; continue the diversification of the industry; and continue to improve overall energy efficiency in the economy. The analysis in this SWD leads to the conclusion that Finland has made some progress on measures taken to address these recommendations.

Research, development and innovation

Finland is very strong in international competitiveness rankings but has nevertheless lost export market share at the fastest pace in the EU over the 2007-12 period. Finland has traditionally been a country with a high trade surplus, but imports grew rapidly prior to the crisis. Since the crisis, export growth has been weak and the external balance has gone into a deficit. The electronics, forestry and steel industries are all facing structural adjustment problems. Other branches have not been able to compensate for lost exports. Finnish companies are internationalising their production and integrating into global value chains that take a toll on exports from Finland. The adjustment capacity of the economy is constrained by low productivity, weak domestic competition in services, continuing wage-cost pressures and high energy costs, affecting in particular the energy-intensive industries. Finnish exporters have been able to sustain price competitiveness mainly by compressing profit margins. The

[31] Final goods sector mark-ups is the difference between the selling price of a good/service and its cost. Entry cost refers to the cost of starting a business in the intermediate sector. The implicit consumption tax rate is a proxy for shifting taxation away from labour to indirect taxes. The benefit replacement rate is the % of a worker's pre-unemployment income that is paid out by the unemployment scheme. For a detailed explanation of indicators see Annex.

[32] For a detailed explanation of the transmission mechanisms of the reform scenarios see: European Commission (2013), "The growth impact of structural reforms", Chapter 2 in QREANo. 4. December 2013. Brussels; http://ec.europa.eu/economy_finance/publications/qr_euro_area/2013/pdf/qrea4_section_2_en.pdf

2014 in-depth review finds that unless profit margins are restored, incentives to invest and to translate the readily available high innovation potential into new products and services will be lower. Adequate conditions are necessary in helping to turn investment in R&D and innovation into new innovative products and services, so as to improve the competitiveness of the industries facing structural challenges and to foster growth in other sectors.

Box 4: Conclusions from the March 2014 in-depth review on Finland

The third in-depth review on Finland under the Macroeconomic Imbalances Procedure was published on 5 March 2014.[33] On the basis of this review, the Commission has concluded that Finland continues to experience macroeconomic imbalances which require monitoring and policy action. In particular, the weak export performance in recent years, driven by industrial restructuring as well as cost- and non-cost-competitiveness factors, deserves continued attention.

More specifically, high import growth prior to the crisis and subdued exports afterwards explain the erosion of the external balance. However, the current account has stabilised recently and external sustainability is not a concern. The country has continued to lose export market share rapidly, despite the recovery in world trade. Finland's integration into global value chains has played a role in the declining performance of exports, while the industrial restructuring has not yet been able to make up for the large downsizing of the electronics, forestry and metal industries. In turn, the adjustment capacity of the economy is constrained by low productivity and weak competitive pressures in services, as well as increasing costs due to dynamic wage growth in the past and high energy intensity. Exporters have had to sustain price competitiveness mainly by compressing profit margins, which has limited their capacity to translate the high innovation potential into new products. Non-cost factors appear to explain most of the deterioration in competitiveness: a limited number of large exporting firms selling a narrow product range, small companies being less inclined to export and less efficient R&D spending. In turn, weak investment, a declining working population and a significant drop in productivity weigh on potential growth. As regards public finances, the structural deficit is expected to be slightly above its medium-term objective in 2014 while public debt is projected to increase to above 60% of GDP, partly due to the unfavourable growth dynamics.

The in-depth review also discusses the policy challenges stemming from these developments:

- impact of labour costs on competitiveness;

- cost-competitiveness in general and the profitability of firms; and

- non-price-competitiveness.

Finland has taken action to bring about structural change. According to the 2014 national reform programme, the policy measures to improve innovation and productivity include the ICT 2015 programme, the Cleantech programme, the bioeconomy strategy, strategic programme for the forest sector, action plan for sustainable extractive industry etc. More focus is also being put on life sciences, Arctic competencies, education, creative industries and design. The Team Finland initiative, while seeking to be customer-driven, also tries to proactively promote internationalisation and the sharing of best practices, in particular in terms of organisational efficiency and working methods. Overall, encouraging results have

[33] European Economy. Occasional Papers. 177. March 2014.

been achieved at firm level, including in the games industry. The government has also decided to lower the corporate tax rate to 20 % from 2014 onwards. The national energy and climate strategy was adopted in March 2013, with 17 decisions promoting R&D, demonstration projects, market competitiveness, technology commercialisation and firm internationalisation, with a new Energy Efficiency Law in the pipeline.

While Finland has the second highest public R&D intensity of all Member States, it ranks sixth on the EU innovation output indicator: the efficiency of the Finnish research and innovation system in turning investment in R&D into scientific excellence and into new innovative products and services is a critical issue. The main reform to address this is the comprehensive reform of the research institutes and research funding, launched in 2013. It marks a major restructuring of the Finnish research and innovation landscape with a view to strengthening multidisciplinary and high-level research of social significance. National sectoral research institutes will gradually be combined into larger entities and a Strategic Research Council will be established. The Council is expected to finance 'research-seeking solutions' to challenges for Finnish society and promote renewal of the country's economic base and competitiveness. Moreover, the government has tasked the Research and Innovation Council with preparing new guidelines for 2014-20. As recommended by several expert evaluations, the government is introducing improvements to the operational concept of the strategic centres of science, technology and innovation (public-private partnerships of research groups and industry aimed at speeding up innovation and renewing industrial clusters). In addition, the funding model of both universities and polytechnics is being reformed with the aim of, for example, better utilising the results of the research. Finland has made some progress in addressing the recommendation although the impact of the actions can be measured only in the longer term.

Business R&D intensity is declining and the national target for R&D expenditure seems further out of reach. R&D intensity in Finland decreased to 3.55 % of GDP in 2012 (3.80 % of GDP in 2011). While this remains the highest value in the EU, the decreasing trend since 2009 means that Finland is not on track to reach its R&D intensity target of 4 % for 2020. This trend is due to the decrease in business R&D intensity (from 2.81 % of GDP in 2009 to 2.44 % in 2012) as a result of the severe restructuring of the R&D-intensive electronics sector. The public R&D expenses remained at around EUR 2 billion in 2012. Due to the government budget deficit, the volume of public R&D funding is not expected to increase in the coming years. The temporary tax incentive for R&D, a novelty in Finland, which applies only in the fiscal years 2013 and 2014, represents a supplementary public effort to support R&D.

Energy policy, environment and climate change

Finland's economy is energy and carbon intensive, phenomena explained by the geographical location, size of the country and industrial specialisation. Finland's energy imports (expressed as a percentage of GDP) are higher than the EU average, making Finland relatively vulnerable to rising energy prices. However, many industrial consumers are also energy producers or own shares in electricity production facilities, thus limiting the vulnerability. According to the national reform programme, energy audits have been performed in major industrial facilities and these do not reveal major cost-effective energy-efficiency measures, supporting the thesis that the energy-intensive economy is at the same time energy-efficient. The energy intensity of the Finnish economy decreased between 2005 and 2010 by 5 % (approximately), against an EU average decrease of 12 %, Finland's industrial sector increased its energy efficiency between 2000 and 2010 by 10 %, which is roughly the EU average. The lion's share of this improvement has taken place in the paper industry, which dominates Finland's industrial sector. However, in recent years, the steel sector in particular has shown declining energy efficiency.

Finland has had an active energy efficiency policy for decades, including National Action Plans and the operating institutional structures. Substantial progress has been made in energy efficiency through policies in place to support innovation and start-up companies. In industries and tertiary sector, voluntary agreements have been made among the most important policy tools. In the building sector, a new building code, which entered into force in July 2012, has in general tightened energy efficiency requirements by 20 % compared with 2010 levels. A national energy and climate roadmap 2050 is being prepared, as well as a specific law to implement new energy efficiency obligations. Further action is needed however as in industry the rate of energy-efficient modernisations is low. As an energy-intensive economy Finland would benefit from further improving energy efficiency.

Finland could also benefit from diversifying its energy supply, particularly as it relies on a single gas source. The Baltic Energy Market Interconnection Plan should continue to be implemented. In 2013, the integration of the Finnish (and Nordic) electricity market with that of the Baltics improved as a result of Estlink2 becoming operational. As regards gas supply, two memorandums of understanding have been signed, aiming at the Baltic Connector – a gas supply pipeline between Finland and Estonia to be completed in 2015; and at agreeing on a regional LNG terminal.

Eco-innovation is seen as one of the potential areas for new rapidly growing enterprises and it could be used to solve some of the remaining environmental challenges. Problems that could be addressed with better technologies in environmental management include resource efficiency – there is scope to improve the business environment by setting up programmes for hands-on support to SMEs to use fewer resources — including energy — in order to save costs and create or ensure jobs. Reducing landfilling and increasing recycling is one of the main challenges related to waste management in Finland. Finland has still a high proportion of landfilled waste (45%). In addition, reduction of air pollution remains an important target. It has been estimated that air pollution (especially the particulate matter, originating from transport for example) in Finland is responsible for up to 2000 premature deaths (year 2010) and significant health-related external costs.[34]

Finland has a 16% greenhouse gas emission reduction target by 2020 (compared to 2005) in the sectors not covered by the EU emission trading scheme (ETS). In 2012, emissions were 10% below the 2005 level. According to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be missed by a margin of 4 percentage points: -12% in 2020 compared to 2005. Thus the existing measures in this area are not seen as sufficient. While greenhouse gas emissions from transport declined both in 2008 and 2009 (by 3.9 % and 8.4 % respectively), there was an increase of 3.7 % in 2010. Measures to better target economic incentives have been taken, but the objective of systematically reducing greenhouse gas emissions in the transport sector remains a challenge.

Services sector and market competition

Finland is one of Europe's leading digital economies and this strength should be used more proactively in finding competitive advantages and modernising public services. Despite geographical challenges, Finland's infrastructure is among the most developed in Europe. Finland has strong investment in the telecommunications sector and very extensive fixed broadband coverage, with Europe's one of the highest coverage of high-quality networks ('fibre to premises'). Number portability is very high and there are extensive

[34] Data: DG ENV Unit C1 (based on the *Impact Assessment of Air Package, 2014*).

services available also for disabled users. Investment in the sector is strong, with Finland among the Member States that have experienced investment growth. As a result, high-speed broadband is available to 65.5 % of the population (53.7 % in the EU) and Finland has Europe's one of the highest coverage of ultrafast fibre networks (33.3 % of the population against the EU average of 12.3 %).

In non-tradable services sector, competition is seen to be weak and prices are high for consumers as well as for enterprises. Lack of competition is seen as one of several factors that hampers the restructuring of the economy. The retail market in Finland is highly concentrated. Its two main retail groups (that own hypermarkets, supermarkets and smaller outlets) account for over 70 % of market share. A recent study of the Finnish Competition and Consumer Authority on the regulation of store location finds that if neither the regulation of store locations nor municipal plotting policies enhance retail competition, other efforts to increase competition may prove somewhat fruitless. In June 2013, the Finnish Competition and Consumer Authority issued recommendations aimed at addressing obstacles to entry and competition in the retail sector (such as land use and building legislation). In November 2013, the government decided to include some of those recommendations in amendments to the land use and planning legislation by, for example, introducing a competition test and competition as an objective in that legislation. The government also aims to improve the transparency of municipal land allocation, in line with one of the recommendations of the Competition and Consumer Authority. The government did not however follow the authority's recommendation to make the land use and planning legislation on the establishment of large-scale retail outlets less restrictive, committing itself only to including the objective to improve competition in the targets and requirements of the land use plans of different levels and the special provisions for retail trade. An expert group, in its recent assessment of the Land Use and Planning Act, estimated that the relatively recent provisions (2011) on the location of large-scale outlets are still justified.[35] The location of the state-owned alcohol monopoly, which is typically located next to the two largest retailers, also influences retail competition by reinforcing market concentration through shopping synergies. The retail trade sector continues to be among the most regulated in the Member States, with obstacles created by licensing rules, regulation of large retail premises and protection of existing firms[36].

Finland has made some progress in implementing the programme on promoting healthy competition. In 2013, the competition and consumer authorities merged. The new structure is now in the early stages of implementation. In terms of substantive law, Finland has introduced new and stricter provisions, providing for the non-rebuttable presumption of dominant positions as from 30 % market share, to address the specific situation of its retail sector (the entrenched duopoly of two main retail groups: see above). The implementation and benefits arising from these provisions, which use an exception in EU law, merits monitoring. In terms of fines and other sanctions, the law was strengthened in 2011. Given the normal time needed for the provisions on fines to make an impact in decision-making practice, this is equally an area for ongoing monitoring. Recent cases, even on the basis of the previous law, seem to suggest that the competent courts are willing to impose effective fines. According to the national reform programme, The government is also conducting a study on the question of potential criminalisation of competition law sanctions. A report is expected in May 2014. Criminal enforcement poses additional challenges, and analysis should be carried out as to whether fines on undertakings in combination with leniency programmes would not yield better results.

[35] http://www.ymparisto.fi/fi-FI/Rakentaminen/Maankaytto_ja_rakennuslain_kokonaisarvio(28271.

[36] See OECD (2013), Product Market Regulation Database, www.oecd.org/economy/pmr.

3.5. Modernisation of public administration

Taking into account the challenges presented by ageing as well as fiscal pressures, public administration should be as efficient as possible. While the level of services provided by the administration is very high, the associated costs are also high and some areas for additional efficiency could be found. Finnish municipalities are relatively small, but currently they have to carry out quite extensive tasks compared to other countries. The small size of municipality raises questions regarding the effectiveness of expenditure on administration, but more importantly it is not clear whether the small municipalities are able to solve the problems in transport, education etc in most effective manner.

In 2013, Finland received a CSR on the implementation of the ongoing administrative reforms concerning the municipal structure in order to deliver productivity gains and cost savings in the provision of public services, including social and healthcare services, and to ensure the sustainability of the system, which is challenged by an increase in demand due to demographic changes. The analysis in this SWD leads to the conclusion that Finland has made some progress on measures taken to address this recommendation.

The reform of the municipal structure is progressing according to the previous plans and the government is committed to reducing local authorities' duties and obligations. The municipal reform is built on voluntary mergers of the municipalities, which are currently preparing detailed studies on the benefits of the mergers. Municipalities that will make merger decisions within the deadline will be entitled to grants and compensation. According to the national reform programme, the government has decided to appoint special rapporteurs for the 12 larger metropolitan regions to study the potential mergers. The outcome of the voluntary mergers appears uncertain at this stage and it appears that there would be no forced merger according to the current plans.. However, the government has set in the structural policy programme targets to reduce the duties and obligations and to cut the overlapping activities in order to increase the efficiency. At the same time, the municipalities are expected to improve productivity and to increase tax revenues, thus closing the deficit (1% of GDP) currently persistent in the local government sector.

The political parties have reached an agreement regarding the provision of social and healthcare services. All social welfare and healthcare services are to be delivered by five strong regional providers, based on current, specific catchment areas. According to the national reform programme, the point of departure for the reform is the full integration of all social welfare and healthcare services by a strong regional provider. Municipalities would continue to participate in the provision of services, but significant share of their obligations are transferred to the five regions.. Local services, such as healthcare services, home help services for the elderly and social welfare services, should still be provided close to home. The legislative proposal is due to be submitted to parliament in autumn 2014 and it is expected that the new structures will be effective by 2017.

To lower the administrative burden faced by enterprises, the government is seeking to simplify licensing requirements, in particular construction permits, environmental permits and sector-specific permits. The Environmental Protection Act is being revised with a view to expanding the use of electronic permits and combining various environment-related permits, and regional authorities are being encouraged to cooperate in their supervisory and permit policies. A bill concerning the appeals process on administrative issues will be presented to parliament in spring 2014. Enhancing the availability of e-government services and the building of the National Digital Services Infrastructure is progressing and completion is planned for 2015. The government is also implementing its

structural policy programme decisions concerning obstacles to entry and growth, in particular in the retail trade.

For the 2014-2020 period, Finland is planning to concentrate the European Regional Development Fund and European Social Fund to the priorities that are in line with the Europe 2020 strategy and previous recommendations. The six priorities are research and innovation, competitiveness of SMEs, shift to low-carbon economy, employment, social inclusion and combating poverty. The programme's measures focus mainly on job creation, innovation promotion via smart specialisation, diversification of business structures, innovative growth companies, reinforcing sustainable and efficient use of resources for environment-friendly growth, increasing labour market participation through improved employment, social inclusion and education policies.

4. CONCLUSIONS

Finland is still going through a difficult process of industrial restructuring, as the electronics and paper sectors are in decline. Against this background, economic growth is forecast to be low in the years to come. Therefore, the most important issue is restoring competitiveness and creating new growth sectors. Challenges also remain in the areas of employment, competition and fiscal policy. Restoring growth would alleviate problems in public finances but would not, on its own, solve long-term sustainability issues. The latter needs the implementation of the structural reforms announced by the government.

The analysis in this staff working document leads to the conclusion that Finland has made some progress in addressing the 2013 country-specific recommendations. However, important challenges remain in almost all areas addressed by the recommendations. Ambitious intentions have been announced but, in many areas, concrete action has not been taken or the plans have not been translated into legislative or fiscal measures. However, the government has undertaken additional bold consolidation measures to secure the sustainability of public finances and agreement has been reached between the social partners to align wage and productivity growth.

The structural policy programme announced in August 2013 and the government's spending limits and fiscal plan for 2015-2018 agreed in March 2014, developed further in the national reform programme, are important steps forward. The reforms and measures outlined in these would make a difference in closing the sustainability gap, if rigorously implemented over the coming years. A comprehensive reform of the pension system is to be adopted in 2017. Reform of the municipal structure and related reforms to improve the efficiency of social and healthcare services are on the way, but the final direction and extent of these reforms is still unclear.

Challenges identified in last years' staff working document and reiterated in the AGS thus remain broadly valid. The policy plans submitted by Finland address these challenges, and coherence between the two programmes has been ensured. The national reform programme confirms Finland's commitment to address shortcomings in the areas of the sustainability of public finances, labour market and economic restructuring. The stability programme assures that Finland is committed to broadly comply with the requirements of the preventive arm of the Stability and Growth Pact.

OVERVIEW TABLE[37]

2013 commitments	Summary assessment
Country-specific recommendations (CSRs)	
CSR 1: Pursue a growth-friendly fiscal policy and preserve a sound fiscal position as envisaged, ensuring compliance with the MTO over the programme horizon. Continue to carry out annual assessments of the size of the ageing-related sustainability gap and adjust public revenue and expenditure in accordance with long-term objectives and needs. Ensure the cost-effectiveness and sustainability of long-term care and put a stronger focus on prevention, rehabilitation and independent living.	Finland has made **substantial progress** in addressing CSR: • Some progress has been made in preserving the sound fiscal position. After the risk of deviation from the MTO in 2014 was recognised, ambitious consolidation measures were decided for 2015. • Substantial progress has been made in addressing the sustainability gap problems. Measures to adjust public revenue and expenditure and to increase the growth potential have been prepared, with the objective of closing the gap. • Substantial progress has been made in putting a stronger focus on prevention, rehabilitation and independent living in long-term care, with the passing of a new Act on services for older people in July 2013.
CSR 2: Ensure effective implementation of the ongoing administrative reforms concerning the municipal structure, in order to deliver productivity gains and cost savings in the provision of public services, including social and healthcare services.	Finland has made **substantial progress** in addressing this CSR. • Some progress in the reform of municipal structure. Studies on the benefits of the mergers of municipalities are continuing as planned, but show a tendency to lag behind the initial objective. • Substantial progress in the area of social and healthcare services, as all political parties have agreed on the main elements of the upcoming reform.
CSR 3: Take further steps to increase the employment rate of older workers, including by improving their employability and reducing early exit pathways,	Overall Finland has made **some progress** in addressing this CSR.

[37] The following categories are used to assess progress in implementing the 2013 country-specific recommendations:
No progress: The Member State has neither announced nor adopted any measures to address the CSR. This category also applies if a Member State has commissioned a study group to evaluate possible measures.
Limited progress: The Member State has announced some measures to address the CSR, but these measures appear insufficient and/or their adoption/implementation is at risk.
Some progress: The Member State has announced or adopted measures to address the CSR. These measures are promising, but not all of them have been implemented yet and implementation is not certain in all cases.
Substantial progress: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the CSR.
Fully addressed: The Member State has adopted and implemented measures that address the CSR appropriately.

increasing the effective retirement age by aligning retirement age or pension benefits to changes in life expectancy. Implement and monitor closely the impact of on-going measures to improve the labour-market position of young people and the long-term unemployed, with a particular focus on the development of job-relevant skills.	• Some progress has been made as regards the pension reform (by agreeing the timetable and conducting important studies) and reducing early exit pathways to retirement. But pathways such as the 'unemployment tunnel' remain. • Limited progress on employability of older workers. • Substantial progress on young people, including implementing a youth guarantee. Some progress on long-term unemployment with measures to reduce structural unemployment with active labour market policies (ALMPs) and more incentives to work.
CSR 4: Continue efforts to enhance competition in product and service markets, especially in the retail sector, by implementing the new programme on promoting healthy competition.	Finland has made **some progress** in addressing this CSR. Although steps have been taken to improve competition in the retail sector, issues remain with regard to large commercial establishments, due to planning law restrictions and market conditions. The healthy competition programme is not yet fully implemented.
CSR 5: Boost Finland's capacity to deliver innovative products, services and high-growth companies in a rapidly changing environment, and continue diversification of the industry; continue to improve the overall energy efficiency in the economy. In the current low-growth environment, support the alignment of real wage and productivity developments whilst fully respecting the role of social partners and in line with national practices.	Finland has made **some progress** in addressing the CSR. • Some progress in addressing the capacity to deliver innovative products and regarding the diversification of industry. Although these areas are outside the direct influence of the government, a considerable number of policy initiatives have been launched to promote growth and innovation, many of them as part of the government's 2013 structural policy programme. The government adopted a resolution on comprehensive reform of the research institutes and research funding. The new R&I guidelines are undergoing preparation and the recommendations of several evaluations (e.g. strategic centres of science, technology and innovation), Academy of Finland) are being implemented. Moreover, the government is reforming the funding model of both the universities and polytechnics with specific attention to the utilisation of research. • Substantial progress has been made in energy efficiency through policies supporting innovation and start-up companies. In 2013, Finland announced its national indicative energy target (Article 3 EED). A national Roadmap to 2050 is under preparation, along with a specific law

	to implement new energy efficiency obligations. • Substantial progress has been made in supporting the alignment of real wage and productivity developments, as the social partners have agreed very limited wage growth in 2014-15, in line with the recommendation.
Europe 2020 (national targets and progress)	
Policy field target	**Progress achieved**
Employment rate target: 78 %	In 2013, the rate was 73.80% (estimate). The average annual employment growth required to reach the target is 0.42 % in 2013–20. Achieving the target will depend on economic conditions, but will also require national efforts.
R&D target: 4 % of GDP	Finland is not on track to reach its R&D intensity target for 2020, due to a sharp decrease in business R&D intensity (from 2.79 % of GDP in 2009 to 2.44 % in 2012). The public R&D budget has remained fairly stable at around EUR 2 billion (in 2011 and 2012), producing a public R&D intensity of 1.11 % for 2012. Due to the government budget deficit, the volume of public R&D funding is not expected to increase in the coming years. However, the new demand-side measure — a temporary tax incentive for R&D which applies only in fiscal years 2013 and 2014 — represents a significant public effort to support R&D. The efficiency of such tax measures will however depend on how they are defined and how well they are targeted.
Greenhouse gas (GHG) emissions target:	
Renewable energy target: 38 % by 2020 Share of renewable energy in all modes of transport: 20 % by 2020	RES share in 2012: 34.3 % RES share of transport in 2012: 0.4 %. The country needs to give special attention to sustainable biomass utilisation due to its heavy dependence on biomass to achieve its targets. Finland has adopted new renewable energy measures since the adoption of the Renewable Energy Directive. Most importantly, it has adopted a feed-in premium, the Act on Production Support to Electricity from Renewable Energy Sources, which provides financial support for wind power, hydro power, biogas, other biomass sources, and CHP (combined heat and power).
Energy efficiency target: 310 TWh By 2020: level of 35.9 Mtoe primary consumption and 26.7 Mtoe final energy consumption	Finland has notified the policy measures it plans to adopt to implement Article 7 of the Energy Efficiency Directive.

Early school leaving target: 8 %	Finland performs better than the EU average for the early school leaving (ESL) rate. In Finland it was 9.2 % (provisional data) vs an EU average of 12.0 % in 2013. However, there was a slight increase in 2013 and it tends to be significantly higher among migrants, with an estimate of 14.9 % in 2012. The overall ESL rate has remained fairly stable over the last decade. In 2011-12, the rate decreased by 0.9 pps. In 2013 the Finnish authorities decided to make the pre-school year at the age of 6 compulsory and to extend the compulsory age of education by one year to 17 years. It remains to be seen whether this measure will have a positive impact on the evolution of ESL in Finland.
Tertiary education target: 42 % (narrow national definition, excluding tertiary VET)	Finland is performing quite well as regards the tertiary attainment rate. The rate in 2013 was 45.3 % (provisional data) as against an EU average of 36.6 % (EU-wide definition); it has therefore exceeded the EU headline target for 2020. However, as Finland based its national target on a narrow national definition (excluding tertiary VET) the attainment rate is estimated at 38-40 % according to Finnish national definition. The country has thus almost reached its national target as well. The rate for foreign-born persons remains lower than for natives — 33 % vs. 47 % in 2012 (EU-wide definition). The drop-out rate from higher education in 2011 was, according to the OECD, 24.2 % in Finland, as compared to an OECD average of 31.6 % for the same year.
Risk-of-poverty or social exclusion target: Number of people living at risk of poverty or social exclusion: no more than 770,000	At risk of poverty and social exclusion: 17.2 % in 2012. According to the 2014 2013 NRP, the risk of poverty or social exclusion affects around 854 000 people. Poverty has increased in particular in the metropolitan regions and concentrated within certain areas particularly.

ANNEX

Standard Tables

Table I. Macro-economic indicators

	1996-2000	2001-2005	2006-2010	2011	2012	2013	2014	2015
Core indicators								
GDP growth rate	4.8	2.6	1.0	2.8	-1.0	-1.4	0.2	1.0
Output gap [1]	0.4	-0.3	0.6	-0.1	-1.4	-2.7	-2.6	-1.9
HICP (annual % change)	1.6	1.4	2.0	3.3	3.2	2.2	1.4	1.4
Domestic demand (annual % change) [2]	4.0	3.0	0.9	4.2	-0.8	-1.4	-0.6	0.8
Unemployment rate (% of labour force) [3]	11.7	8.9	7.5	7.8	7.7	8.2	8.5	8.4
Gross fixed capital formation (% of GDP)	19.2	19.4	20.3	19.4	19.7	18.9	18.4	18.8
Gross national saving (% of GDP)	24.8	26.5	23.8	19.1	18.1	17.0	17.1	17.8
General government (% of GDP)								
Net lending (+) or net borrowing (-)	**1.1**	**3.5**	**1.8**	**-0.7**	**-1.8**	**-2.1**	**-2.3**	**-1.3**
Gross debt	**49.7**	**42.9**	**40.2**	**49.3**	**53.6**	**57.0**	**59.9**	**61.2**
Net financial assets	**22.0**	**41.3**	**64.5**	**54.3**	**55.4**	**n.a**	**n.a**	**n.a**
Total revenue	55.1	52.9	53.2	54.1	54.5	56.0	56.3	57.0
Total expenditure	53.9	49.5	51.4	54.8	56.3	58.1	58.6	58.3
of which: Interest	3.5	1.9	1.3	1.1	1.0	1.0	1.0	1.0
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	**5.3**	**5.0**	**3.7**	**1.8**	**2.6**	**2.4**	**3.0**	**2.5**
Net financial assets - non-financial corporations	**-183.5**	**-143.0**	**-137.1**	**-98.2**	**-100.3**	**n.a**	**n.a**	**n.a**
Net financial assets - financial corporations	**3.4**	**2.4**	**2.0**	**7.6**	**2.9**	**n.a**	**n.a**	**n.a**
Gross capital formation	11.0	10.9	10.9	10.7	9.9	9.0	8.6	9.1
Gross operating surplus	25.6	25.9	24.0	21.3	20.4	19.4	19.2	19.1
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	**-1.1**	**-1.9**	**-2.1**	**-2.1**	**-2.2**	**-1.7**	**-1.3**	**-1.5**
Net financial assets	**60.8**	**66.2**	**62.0**	**54.8**	**52.1**	**n.a**	**n.a**	**n.a**
Gross wages and salaries	38.3	38.7	40.3	41.6	42.1	42.3	41.9	41.6
Net property income	3.8	4.3	4.1	4.0	3.9	3.5	3.2	3.1
Current transfers received	22.2	20.2	20.5	22.2	23.0	23.9	24.3	24.1
Gross saving	4.8	4.8	5.2	5.3	5.3	5.5	5.6	5.4
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	**5.7**	**6.5**	**3.2**	**-1.3**	**-1.3**	**-0.7**	**-0.3**	**-0.1**
Net financial assets	**97.9**	**33.6**	**9.6**	**-16.8**	**-8.3**	**n.a**	**n.a**	**n.a**
Net exports of goods and services	8.2	7.2	3.3	-0.7	-1.0	-0.1	0.4	0.6
Net primary income from the rest of the world	-1.8	0.1	0.9	0.3	0.5	0.6	0.6	0.6
Net capital transactions	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tradable sector	46.2	45.9	42.3	39.3	38.1	37.5	n.a	n.a
Non-tradable sector	40.5	41.2	44.9	46.9	47.9	48.2	n.a	n.a
of which: Building and construction sector	5.1	5.4	6.1	5.8	6.0	5.9	n.a	n.a
Real effective exchange rate (index: 2000=100)	99.2	97.1	103.7	106.2	105.9	110.0	112.4	111.9
Terms of trade goods and services (index: 2000=100)	110.2	104.8	95.6	92.1	91.0	91.1	91.3	91.2
Market performance of exports (index: 2000=100)	97.4	102.3	102.2	93.0	91.9	91.5	90.6	89.9

Notes:

[1] The output gap constitutes the gap between actual and potential GDP at 2000 market prices.

[2] The indicator for domestic demand includes stocks.

[3] Unemployed persons are persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total of employed and unemployed persons. The unemployment rate covers the 15-74 age group.

Source:
Commission 2014 spring forecast

Table II. Comparison of macroeconomic developments and forecasts

	2013		2014		2015		2016	2017	2018
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	-1.4	-1.4	0.2	0.5	1.0	1.4	1.8	1.5	1.4
Private consumption (% change)	-0.8	-0.8	-0.1	0.0	0.3	0.3	1.1	1.5	1.5
Gross fixed capital formation (% change)	-4.6	-4.4	-3.3	-3.1	2.6	3.6	3.2	2.0	1.9
Exports of goods and services (% change)	0.3	0.3	2.7	3.5	4.5	4.1	4.8	4.5	4.5
Imports of goods and services (% change)	-1.8	-1.8	1.6	2.1	4.0	3.3	3.9	4.2	4.4
Contributions to real GDP growth:									
- Final domestic demand	-1.2	-1.2	-0.6	-0.5	0.8	0.9	1.4	1.3	1.3
- Change in inventories	-0.3	-1.1	0.0	0.4	0.0	0.1	0.0	-0.1	-0.1
- Net exports	0.9	0.9	0.5	0.6	0.2	0.3	0.4	0.2	0.1
Output gap[1]	-2.7	-2.9	-2.6	-2.6	-1.9	-1.7	-0.6	0.2	0.8
Employment (% change)	-1.3	-1.0	-0.2	0.0	0.3	0.0	1.0	0.0	0.0
Unemployment rate (%)	8.2	8.0	8.5	8.0	8.4	8.0	8.0	8.0	8.0
Labour productivity (% change)	-0.1	0.0	0.4	1.0	0.7	1.0	1.0	1.0	1.0
HICP inflation (%)	2.2	2.3	1.4	2.2	1.4	1.8	2.0	2.0	2.0
GDP deflator (% change)	2.0	2.0	1.6	1.6	1.4	1.4	1.5	1.8	1.9
Comp. of employees (per head, % change)	2.1	2.0	1.5	2.0	1.6	1.0	2.0	2.0	2.0
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-0.7	-0.7	-0.3	-0.3	-0.1	-0.1	0.3	0.7	0.8

Note:

[1]In percent of potential GDP, with potential GDP growth recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.

Source:

Commission 2014 spring forecast (COM); Stability programme (SP).

Table III. Composition of the budgetary adjustment

(% of GDP)	2013	2014		2015		2016	2017	2018	Change: 2013-2018
	COM	COM	SP	COM[1]	SP	SP	SP	SP	SP
Revenue	**56.0**	**56.3**	**56.4**	**57.0**	**56.8**	**57.0**	**57.3**	**57.4**	**1.4**
of which:									
- Taxes on production and imports	14.8	15.1	15.1	15.3	15.2	15.1	14.9	14.8	0.0
- Current taxes on income, wealth, etc.	16.9	16.7	16.7	16.8	16.8	17.0	17.3	17.5	0.6
- Social contributions	13.4	13.6	13.6	13.7	13.6	13.7	13.6	13.6	0.2
- Other (residual)	10.8	11.0	11.0	11.2	11.2	11.2	11.5	11.5	0.7
Expenditure	**58.1**	**58.6**	**58.4**	**58.3**	**57.9**	**57.6**	**57.3**	**57.2**	**-0.9**
of which:									
- Primary expenditure	57.2	57.6	57.4	57.3	56.8	56.4	55.9	55.7	-1.5
of which:									
Compensation of employees	14.7	14.6	14.4	14.4	14.1	13.8	13.6	13.4	-1.3
Intermediate consumption	12.1	12.4	12.3	12.6	12.3	12.4	12.3	12.3	0.2
Social payments	22.6	23.0	23.1	22.7	23.0	23.1	23.2	23.3	0.7
Subsidies	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.2	-0.2
Gross fixed capital formation	2.8	2.9	2.8	2.8	2.7	2.6	2.5	2.4	-0.4
Other (residual)	3.5	3.5	3.3	3.4	3.3	3.2	3.1	3.1	-0.4
- Interest expenditure	1.0	1.0	1.0	1.0	1.1	1.2	1.4	1.5	0.5
General government balance (GGB)	**-2.1**	**-2.3**	**-2.0**	**-1.3**	**-1.1**	**-0.5**	**0.0**	**0.3**	**2.4**
Primary balance	**-1.2**	**-1.3**	**-1.0**	**-0.4**	**0.0**	**0.7**	**1.4**	**1.8**	**3.0**
One-off and other temporary measures	-0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
GGB excl. one-offs	**-2.0**	**-2.3**	**-2.1**	**-1.3**	**-1.2**	**-0.5**	**0.0**	**0.3**	**2.3**
Output gap[2]	-2.7	-2.6	-2.6	-1.9	-1.7	-0.6	0.2	0.8	3.5
Cyclically-adjusted balance[2]	-0.7	-0.9	-0.6	-0.3	-0.2	-0.2	-0.1	-0.1	0.5
Structural balance (SB)[3]	**-0.6**	**-0.9**	**-0.7**	**-0.3**	**-0.3**	**-0.2**	**-0.1**	**-0.1**	**0.5**
Change in SB	*0.4*	*-0.3*	*-0.1*	*0.6*	*0.4*	*0.1*	*0.1*	*0.0*	-
Two year average change in SB	*0.0*	*0.1*	*0.1*	*0.1*	*0.2*	*0.3*	*0.1*	*0.0*	-
Structural primary balance[3]	0.3	0.1	0.3	0.6	0.8	1.0	1.3	1.4	1.0
Change in structural primary balance		*-0.3*	*-0.1*	*0.6*	*0.5*	*0.2*	*0.3*	*0.1*	-
Expenditure benchmark									
Applicable reference rate[4]	n.a.	0.8	0.8	0.6	0.6	n.a.	n.a.	n.a.	-
Deviation[5] (% GDP)	n.a.	0.5	0.2	0.7	0.7	n.a.	n.a.	n.a.	-
Two-year average deviation (% GDP)	n.a.	0.6	0.9	0.6	0.5	n.a.	n.a.	n.a.	-

Notes:

[1] On a no-policy-change basis.

[2] Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.

[3] Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

[4] Reference medium-term rate of potential GDP growth. The (standard) reference rate applies from year t+1, if the country has reached its MTO in year t. A lower rate applies as long as the country is adjusting towards its MTO, including in year t.The reference rates applicable to 2014 onwards have been updated in 2013.

[5] Deviation of the growth rate of public expenditure net of discretionary revenue measures and revenue increases mandated by law from the applicable reference rate. The expenditure aggregate used for the expenditure benchmark is obtained following the commonly agreed methodology. A negative sign implies that expenditure growth exceeds the applicable reference rate.

Source:
Stability programme (SP); Commission 2014 spring forecast (COM); Commission calculations.

Table IV. Debt dynamics

(% of GDP)	Average 2008-2012	2013	2014		2015		2016	2017	2018
			COM	SP	COM	SP	SP	SP	SP
Gross debt ratio[1]	**45.8**	**57.0**	**59.9**	**59.8**	**61.2**	**61.0**	**61.4**	**61.3**	**61.2**
Change in the ratio	3.7	3.3	2.9	2.8	1.4	1.2	0.4	-0.1	-0.1
Contributions[2] *:*									
1. Primary balance	**-0.5**	**1.2**	**1.3**	**1.0**	**0.4**	**0.0**	**-0.7**	**-1.4**	**-1.8**
2. "Snow-ball" effect	**0.4**	**0.6**	**0.0**	**-0.2**	**-0.4**	**-0.5**	**-0.7**	**-0.5**	**-0.4**
Of which:									
Interest expenditure	1.2	1.0	1.0	1.0	1.0	1.1	1.2	1.4	1.5
Growth effect	0.2	0.7	-0.1	-0.3	-0.6	-0.8	-1.1	-0.9	-0.8
Inflation effect	-0.9	-1.1	-0.9	-0.9	-0.8	-0.8	-0.9	-1.1	-1.1
3. Stock-flow adjustment	**3.8**	**1.5**	**1.6**	**2.0**	**1.4**	**1.7**	**1.8**	**1.9**	**2.2**
Of which:									
Cash/accruals diff.				0.0		0.0	0.0	0.0	0.0
Acc. financial assets				2.1		2.2	2.3	2.2	2.1
Privatisation				-0.2		-0.3	-0.2	-0.2	-0.2
Val. effect & residual				-1.4		-2.0	-2.4	-2.3	-1.9

	2013	2014		2015		2016	2017	2018
		COM	SP	COM	SP	SP	SP	SP
Gap to the debt benchmark[3,4]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Structural adjustment[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
To be compared to:								
Required adjustment[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

[1]End of period.

[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

[3] Assessment of the consolidation path set in SP assuming growth follows the COM forecasts.

[4]Assessment of the consolidation path set in the SP assuming growth follows the SP projections.

[5]Not relevant for Member Sates that were subject to an EDP procedure in November 2011 and for a period of three years following the correction of the excessive deficit.

[6]Shows the difference between the debt-to-GDP ratio and the debt benchmark. If positive, projected gross debt-to-GDP ratio does not comply with the debt reduction benchmark.

[7]Applicable only during the transition period of three years from the correction of the excessive deficit for EDP that were ongoing in November 2011.

[8]Defines the remaining annual structural adjustment over the transition period which ensures that - if followed – Member State will comply with the debt reduction benchmark at the end of the transition period, assuming that COM (SP) budgetary projections for the previous years are achieved.

Source :

Stability programme (SP); Commission 2014 spring forecast (COM); Commission calculations.

Table V. Sustainability indicators

	Finland			European Union		
	2013 scenario	**No-policy-change scenario**	**Stability programme scenario**	**2013 scenario**	**No-policy-change scenario**	**Stability programme scenario**
S2*	6.7	6.0	5.5	2.4	2.4	0.7
of which:						
Initial budgetary position (IBP)	1.5	1.3	1.6	0.5	0.4	-1.3
Long-term cost of ageing (CoA)	5.2	4.7	3.9	1.9	2.0	2.0
of which:						
pensions	2.2	1.9	1.3	0.7	0.8	0.9
healthcare	0.7	0.7	0.6	0.9	0.9	0.8
long-term care	2.0	1.9	1.7	0.6	0.6	0.6
others	0.3	0.3	0.3	-0.4	-0.4	-0.3
S1**	3.0	2.1	1.5	1.5	1.7	-0.2
of which:						
Initial budgetary position (IBP)	0.5	-0.3	-0.4	-0.2	-0.4	-2.0
Debt requirement (DR)	-0.2	0.1	0.1	1.5	1.8	1.5
Long-term cost of ageing (CoA)	2.7	2.3	1.9	0.2	0.3	0.3
S0 (risk for fiscal stress)***	0.18	:		:		
Debt as % of GDP (2013)	57.0			88.9		
Age-related expenditure as % of GDP (2013)	28.3			25.8		

Source : *Commission; 2014 stability programme.*
Note : The 2013 scenario depicts the sustainability gap under the assumption that the budgetary position evolves until 2013 in line with the Commission's 2014 spring forecast. The 'no-policy-change' scenario depicts the sustainability gap under the assumption that the budgetary position evolves until 2015 in line with the Commission's 2014 spring forecast. The 'stability programme' scenario depicts the sustainability gap under the assumption that the budgetary plans in the programme are fully implemented. Age-related expenditure as given in the 2012 Ageing Report.

* The long-term sustainability gap (S2) indicator shows the immediate and permanent adjustment required to satisfy an inter-temporal budgetary constraint, including the costs of ageing. The S2 indicator has two components: (i) the initial budgetary position (IBP), which gives the gap vis-à-vis the debt-stabilising primary balance and (ii) the additional adjustment required due to the costs of ageing. The main assumption used in the derivation of S2 is that, in an infinite horizon, the growth in the debt ratio is bound by the interest rate differential (i.e. the difference between the nominal interest and the real growth rates); thereby not necessarily implying that the debt ratio will fall below the EU Treaty 60 % debt threshold. The following thresholds were used for the S2 indicator: (i) if the value of S2 is lower than 2, the country is classed as low risk; (ii) if it is between 2 and 6, it is classed as medium risk; and (iii) if it is greater than 6, it is classed as high risk.

** The medium-term sustainability gap (S1) indicator shows the upfront adjustment effort required, in terms of a steady improvement in the structural primary balance in the period to 2020 and then sustained for a decade, to bring debt ratios back to 60% of GDP in 2030, including financing for any additional expenditure by the target date, arising from population ageing. The following thresholds were used to assess the scale of the sustainability challenge: (i) if the S1 value is less than zero, the country is classed as low risk; (ii) if a structural adjustment in the primary balance of up to 0.5 pp of GDP per year until 2020 after the last year covered by the 2014 spring forecast (2015) is required (indicating a cumulated adjustment of 2.5 pp), it is classed as medium risk; and (iii) if the S1 value is greater than 2.5 (i.e. a structural adjustment of more than 0.5 pp of GDP per year is necessary), it is classed as high risk.

*** The S0 indicator reflects up-to-date evidence on the role played by fiscal and financial competitiveness variables in creating potential fiscal risks. The methodology for the S0 indicator differs fundamentally from that for the S1 and S2 indicators. Unlike S1 and S2, S0 is not a quantification of the required fiscal adjustment effort, but a composite indicator which estimates the extent to which there might be a risk of fiscal stress in the short term. The critical threshold for the S0 indicator is 0.43.

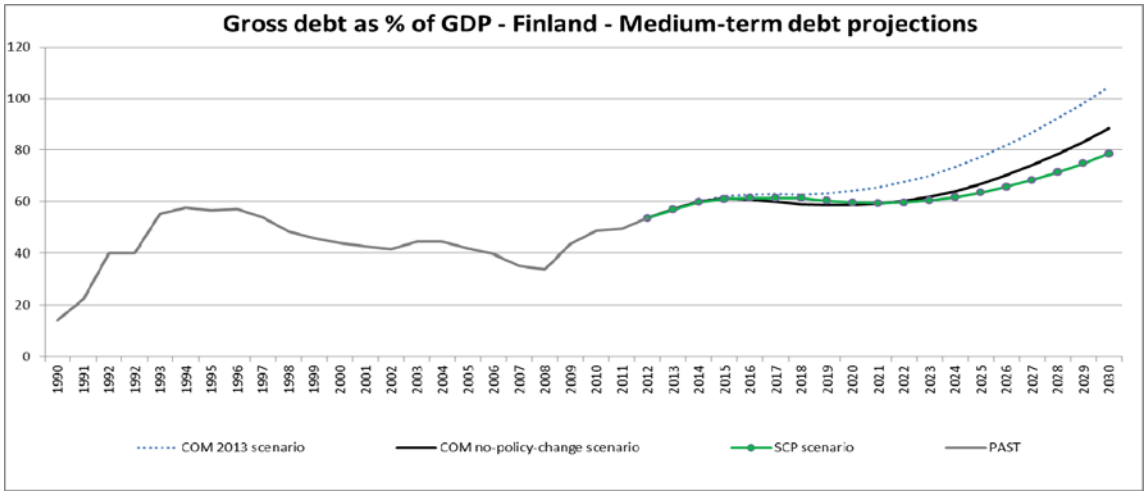

Table VI. Taxation indicators

	2002	2006	2008	2010	2011	2012
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	44.7	43.8	42.9	42.5	43.7	44.1
Breakdown by economic function (% of GDP)[1]						
Consumption	13.4	13.5	12.8	13.2	14.1	14.3
of which:						
- VAT	8.1	8.7	8.4	8.5	9.0	9.2
- excise duties on tobacco and alcohol	1.4	1.0	0.9	1.1	1.1	1.1
- energy	2.0	1.8	1.7	1.8	2.1	2.1
- other (residual)	1.9	2.1	1.8	1.8	1.9	2.0
Labour employed	20.9	20.2	20.3	20.1	20.2	20.8
Labour non-employed	2.4	2.4	2.3	2.5	2.6	2.7
Capital and business income	6.7	6.3	6.2	5.3	5.4	4.9
Stocks of capital/wealth	1.3	1.3	1.3	1.4	1.4	1.5
p.m. Environmental taxes[2]	3.1	3.0	2.7	2.8	3.1	3.1
VAT efficiency[3]						
Actual VAT revenues as % of theoretical revenues at standard rate	58.2	60.6	57.9	51.8	55.1	55.1

Note:

1. Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2014), Taxation trends in the European Union, for a more detailed explanation.

2. This category comprises taxes on energy, transport and pollution, and resources included in taxes on consumption and capital.

3. The VAT efficiency is measured via the VAT revenue ratio. It is defined as the ratio between the actual VAT revenue collected and the revenue that would be raised if VAT was applied at the standard rate to all final (domestic) consumption expenditures, which is an imperfect measure of the theoretical pure VAT base. A low ratio can indicate a reduction of the tax base due to large exemptions or the application of reduced rates to a wide range of goods and services ('policy gap') or a failure to collect all tax due to e.g. fraud ('collection gap'). It should be noted that the relative size of cross-border shopping compared to domestic consumption also influences the value of the ratio, notably for smaller economies. See European Commission (2012), Tax Reforms in EU Member States and OECD (2012), Consumption tax trends for a more detailed discussion.

Source: Commission

Table VII. Financial market indicators

	2009	2010	2011	2012	2013
Total assets of the banking sector (% of GDP)	231.8	268.8	341.4	312.1	271.6
Share of assets of the five largest banks (% of total assets)	82.6	83.8	80.9	79.0	-
Foreign ownership of banking system (% of total assets)	65.1	69.1	70.3	66.6	-
Financial soundness indicators:					
- non-performing loans (% of total loans)[1)]	0.6	0.6	0.5	0.5	...
- capital adequacy ratio (%) [2)]	14.6	14.4	14.2	17.0	15.6
- return on equity (%) [2)]	10.0	9.2	10.1	10.8	10.1
Bank loans to the private sector (year-on-year % change)	0.9	5.6	8.5	7.1	6.3
Lending for house purchase (year-on-year % change)	6.4	6.8	6.6	5.6	2.3
Loan to deposit ratio	142.8	139.3	142.3	139.9	139.2
CB liquidity as % of liabilities	1.0	0.0	0.6	0.9	0.6
Banks' exposure to countries receiving official financial assistance (% of GDP)[3)]	0.0	1.1	0.8	0.4	0.1
Private debt (% of GDP)	153.2	154.3	150.2	157.9	-
Gross external debt (% of GDP)					
- Public	37.5	41.4	43.6	49.7	48.2
- Private	50.1	49.1	45.3	45.4	44.7
Long term interest rates spread versus Bund (basis points)*	51.6	26.7	39.8	39.1	29.2
Credit default swap spreads for sovereign securities (5-year)*	38.1	29.4	49.2	56.4	25.1

Notes:

[1)] Latest data June 2012. Nonperforming loans reported net of specific provisions.

[2)] Latest data 2013Q3.

[3)] Covered countries are CY, EL, ES, LV, HU, IE, PT and RO.

* Measured in basis points.

Source:

Bank for International Settlements and Eurostat (exposure to macro-financially vulnerable countries), IMF (financial soundness indicators), Commission (long-term interest rates), World Bank (gross external debt) and ECB (all other indicators).

Table VIII. Labour market and social indicators

Labour market indicators	2008	2009	2010	2011	2012	2013
Employment rate (% of population aged 20-64)	75.8	73.5	73.0	73.8	74.0	73.3
Employment growth (% change from previous year)	2.6	-2.6	-0.1	1.5	0.1	-1.3
Employment rate of women (% of female population aged 20-64)	73.1	72.4	71.5	71.9	72.5	71.9
Employment rate of men (% of male population aged 20-64)	78.4	74.7	74.5	75.6	75.5	74.7
Employment rate of older workers (% of population aged 55-64)	56.5	55.5	56.2	57.0	58.2	58.5
Part-time employment (% of total employment, 15 years and more)	13.3	14.0	14.6	14.9	15.1	15.1
Part-time employment of women (% of women employment, 15 years and more)	18.2	19.0	19.6	19.6	20.1	20.2
Part-time employment of men (% of men employment, 15 years and more)	8.9	9.2	10.0	10.6	10.3	10.2
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	15.0	14.6	15.5	15.6	15.6	15.5
Transitions from temporary to permanent employment	10.9	37.4	48.7	28.7	30.9	:
Unemployment rate[1] (% of labour force, age group 15-74)	6.4	8.2	8.4	7.8	7.7	8.2
Long-term unemployment rate[2] (% of labour force)	1.2	1.4	2.0	1.7	1.6	1.7
Youth unemployment rate (% of youth labour force aged 15-24)	16.5	21.5	21.4	20.1	19.0	19.9
Youth NEET rate (% of population aged 15-24)	7.8	9.9	9.0	8.4	8.6	9.3
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	9.8	9.9	10.3	9.8	8.9	9.3
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	45.7	45.9	45.7	46.0	45.8	45.1
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	5.0	6.0	8.0	6.0	7.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	21.0	21.0	20.0	20.0	22.0	:
Labour productivity per person employed (annual % change)	-2.2	-6.1	3.4	1.3	-1.1	-0.1
Hours worked per person employed (annual % change)	-1.0	-0.9	0.3	-0.2	0.1	-0.6
Labour productivity per hour worked (annual % change; constant prices)	-1.2	-5.2	3.2	1.5	-1.2	0.5
Compensation per employee (annual % change; constant prices)	1.4	0.8	1.4	0.5	0.5	0.2
Nominal unit labour cost growth (annual % change)	6.7	9.0	-1.6	2.0	4.4	:
Real unit labour cost growth (annual % change)	3.7	7.4	-2.0	-0.8	1.6	0.2

Notes:

[1] Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed.

[2] Long-term unemployed are unemployed persons for at least 12 months.

Sources:
Commission (EU Labour Force Survey and European National Accounts)

Expenditure on social protection benefits (% of GDP)	**2007**	**2008**	**2009**	**2010**	**2011**
Sickness/Health care	6.5	6.8	7.6	7.5	7.5
Invalidity	3.1	3.2	3.6	3.6	3.5
Old age and survivors	9.5	9.6	11.4	11.7	11.7
Family/Children	2.9	2.9	3.3	3.3	3.3
Unemployment	1.9	1.8	2.4	2.4	2.1
Housing and Social exclusion n.e.c.	0.2	0.4	0.5	0.5	0.5
Total	24.6	25.4	29.5	29.7	29.3
of which: means tested benefits	1.1	1.1	1.3	1.3	1.4
Social inclusion indicators	**2008**	**2009**	**2010**	**2011**	**2012**
At-risk-of-poverty or social exclusion[1] (% of total population)	17.4	16.9	16.9	17.9	17.2
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	15.1	14.0	14.2	16.1	14.9
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	23.9	23.1	19.5	19.8	19.5
At-Risk-of-Poverty rate[2] (% of total population)	13.6	13.8	13.1	13.7	13.2
Severe Material Deprivation[3] (% of total population)	3.5	2.8	2.8	3.2	2.9
Share of people living in low work intensity households[4] (% of people aged 0-59)	7.5	8.4	9.3	10.0	9.3
In-work at-risk-of poverty rate (% of persons employed)	5.1	3.7	3.7	3.9	3.8
Impact of social transfers (excluding pensions) on reducing poverty	50.2	47.3	51.5	50.0	50.9
Poverty thresholds, expressed in national currency at constant prices[5]	11 691	11 915	11 939	12 004	12 082
Gross disponsable income (households)	103 509	106 576	111 094	115 516	119 084
Relative median poverty risk gap (60% of median equivalised income, age: total)	15.7	15.1	13.8	13.5	15.0

Notes:

[1] People at-risk-of poverty or social exclusion (AROPE): individuals who are at-risk-of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in household with zero or very low work intensity (LWI).

[2] At-risk-of poverty rate (AROP): share of people with an equivalised disposable income below 60% of the national equivalised median income.

[3] Share of people who experience at least 4 out of 9 deprivations: people cannot 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: share of people aged 0-59 living in households where the adults (excluding dependent children) work less than 20% of their total work-time potential during the previous 12 months.

[5] For EE, CY, MT, SI, SK, thresholds in nominal values in Euros; HICP - index 100 in 2006 (2007 survey refers to 2006 incomes)

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

Table IX. Product market performance and policy indicators

Performance indicators	**2004-2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Labour productivity[1] total economy (annual growth in %)	1.3	-6.7	3.6	0.8	-1.3	-0.2
Labour productivity[1] in manufacturing (annual growth in %)	4.5	-19.9	16.3	-1.2	-6.7	-1.2
Labour productivity[1] in electricity, gas, water (annual growth in %)	-1.7	0.3	9.5	-1.4	11.2	n.a.
Labour productivity[1] in the construction sector (annual growth in %)	-2.4	-3.2	7.7	0.6	-4.4	-3.1
Patent intensity in manufacturing[2] (patents of the EPO divided by gross value added of the sector)	493.8	487.2	484.3	487.7	n.a.	n.a.
Policy indicators	**2004-2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Enforcing contracts[3] (days)	235.0	375	375	375	375	375
Time to start a business[3] (days)	14.0	14	14	14	14	14
R&D expenditure (% of GDP)	3.5	3.9	3.9	3.8	3.6	n.a.
Tertiary educational attainment (% of 30-34 years old population)	45.3	45.9	45.7	46.0	45.8	45.1
Total public expenditure on education (% of GDP)	6.2	6.8	6.9	6.8	n.a.	n.a.
	2008	**2009**	**2010**	**2011**	**2012**	**2013**
Product market regulation[4], Overall (Index; 0=not regulated; 6=most regulated)	1.3	n.a.	n.a.	n.a.	n.a.	1.3
Product market regulation[4], Retail (Index; 0=not regulated; 6=most regulated)	2.9	n.a.	n.a.	n.a.	n.a.	2.9
Product market regulation[4], Network Industries[5] (Index; 0=not regulated; 6=most regulated)	2.5	n.a.	n.a.	n.a.	n.a.	2.4

Notes:

[1] Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.

[2] Patent data refer to applications to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor's place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.

[3] The methodologies, including the assumptions, for this indicator are presented in detail on the website http://www.doingbusiness.org/methodology.

[4] The methodologies of the product market regulation indicators are presented in detail on the website http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html.

[5] Aggregate ETCR.

Source :

Commission, World Bank - *Doing Business* (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).

Table X. Green Growth

		2003-2007	2008	2009	2010	2011	2012
Green Growth performance							
Macroeconomic							
Energy intensity	kgoe / €	0.24	0.22	0.22	0.24	0.22	0.21
Carbon intensity	kg / €	0.52	0.42	0.43	0.47	0.42	n.a.
Resource intensity (reciprocal of resource productivity)	kg / €	1.28	1.26	1.13	1.18	1.12	n.a.
Waste intensity	kg / €	n.a.	0.49	n.a.	0.66	n.a.	n.a.
Energy balance of trade	% GDP	-2.3%	-3.5%	-2.5%	-3.0%	-3.9%	-3%
Energy weight in HICP	%	7	8	7	8	8	8
Difference between change energy price and inflation	%	4.8	13.6	-4.6	8.6	17.2	-3.1
Environmental taxes over labour taxes	ratio	13.5%	11.9%	11.2%	12.3%	13.7%	n.a.
Environmental taxes over total taxes	ratio	7.0%	6.3%	6.2%	6.5%	7.2%	n.a.
Sectoral							
Industry energy intensity	kgoe / €	0.35	0.28	0.28	0.30	n.a.	n.a.
Share of energy-intensive industries in the economy	% GDP	12.6	11.7	10.6	n.a.	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.06	0.07	0.07	0.07	0.07
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	0.03	0.03	0.03	0.04	0.04
Public R&D for energy	% GDP	n.a.	0.09%	0.11%	0.11%	0.11%	0.09%
Public R&D for the environment	% GDP	n.a.	0.01%	0.02%	0.02%	0.02%	0.02%
Recycling rate of municipal waste	ratio	42.0%	46.8%	49.5%	50.3%	59.8%	67.1%
Share of GHG emissions covered by ETS*	%	n.a.	51.6%	52.0%	55.5%	52.5%	48.4%
Transport energy intensity	kgoe / €	0.41	0.39	0.41	n.a.	n.a.	n.a.
Transport carbon intensity	kg / €	1.18	1.08	1.11	n.a.	n.a.	n.a.
Security of energy supply							
Energy import dependency	%	54.8%	54.3%	53.9%	48.0%	53.5%	45.5%
Diversification of oil import sources	HHI	n.a.	0.54	0.61	0.67	0.57	n.a.
Diversification of energy mix	HHI	0.21	0.21	0.21	0.21	0.21	0.21
Share renewable energy in energy mix	%	22.8%	25.4%	23.7%	25.1%	25.6%	29.2%

Country-specific notes:

The year 2012 is not included in the table due to lack of data.

General explanation of the table items:

Source: Eurostat unless indicated otherwise; ECFIN elaborations indicated below

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2000 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

Energy weight in HICP: the share of the "energy" items in the consumption basket used in the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual %-change)

Environmental taxes over labour or total taxes: from DG TAXUD'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)

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP

Electricity and gas prices medium industrial users: consumption band 500 - 2000MWh and 10000 - 100000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of municipal waste recycled over total municipal waste

Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP

Share of GHG emissions covered by ETS: based on greenhouse gas emissions as reported by Member States to EEA (excl LULUCF)

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transp industry gross value added (2005 EUR)

Transport carbon intensity: greenhouse gas 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. energy consumption international bunkers

Diversification of oil import sources: Herfindahl index (HHI), calculated as the sum of the squared market shares of countries of origin

Diversification of the energy mix: Herfindahl Index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels

Share renewable energy in energy mix: %-share in gross inland energy consumption, expressed in tonne oil equivalents

* Commission and EEA.

** For 2007 average of S1 & S2 for DE, HR, LU, NL, FI, SE & UK. Other countries only have S2.

*** For 2007 average of S1 & S2 for HR, IT, NL, FI, SE & UK. Other countries only have S2.

List of indicators used in Box 3 on the potential impact on growth of structural reforms.

Final goods sector mark-ups: Price-cost margin, i.e. the difference between the selling price of a good or service and its cost. Final goods mark-ups are proxied by the mark-ups in selected services sectors (transport and storage, post and telecommunications, electricity, gas and water supply, hotels and restaurants and financial intermediation but excluding real estate and renting of machinery and equipment and other business activities[38]).
Source: Commission services estimation using the methodology of Roeger, W. (1995). "Can imperfect Competition explain the Difference between primal and dual Productivity?" *Journal of Political Economy* Vol. 103(2) pp. 316-30, based on EUKLEMS 1996-2007 data.

Entry costs: Cost of starting a business in the intermediate sector as a share of income per capita. The intermediate sector is proxied by the manufacturing sector in the model.
Source: World Bank, Doing Business Database. www.doingbusiness.org. 2012 data.

Implicit consumption tax rate: Defined as total taxes on consumption over the value of private consumption. In the simulations it is used as a proxy for shifting taxation away from labour to indirect taxes. The implicit consumption tax-rates are increased (halving the gap vis-à-vis the best performers) while labour tax-rates are reduced so that the combined impact is ex-ante budgetary neutral.
Source: European Commission, Taxation trends in the European Union, 2013 edition, Luxembourg, 2013. 2011 data.

Shares of high-skilled and low-skilled: The share of high skilled workers is increased, the share of low-skilled workers is reduced (halving the gap vis-à-vis the best performers). Low-skilled correspond to ISCED 0-2 categories; high-skilled correspond to scientists (in mathematics and computing, engineering, manufacturing and construction). The remainder is medium-skilled.
Source: EUROSTAT. 2012 data or latest available.

Female non-participation rate: Share of women of working age not in paid work and not looking for paid work in total female working-age population
Source: EUROSTAT. 2012 data or latest available.

Low-skilled male non-participation rates: Share of low-skilled men of working age not in paid work and not looking for paid work in total male working-age population
Source: EUROSTAT. 2012 data or latest available.

Elderly non-participation rates (55-64 years): Share of the population aged 55-64 years not in paid work and not looking for paid work in total population aged 55-64 years.
Source: EUROSTAT. 2012 data or latest available.

ALMP: Active Labour Market Policy expenditures as a share of GDP over the share of unemployed in the population.
Source: EUROSTAT. 2011 data or latest available.

[38] The real estate sector is excluded because of statistical difficulties of estimating a mark-up in this sector. The sector renting of machinery and equipment and other business activities is conceptually part of intermediate goods sector.

Benefit replacement rate: Share of a worker's pre-unemployment income that is paid out by the unemployment insurance scheme. Average of net replacement rates over 60 months of unemployment.
Source: OECD, Benefits and Wages Statistics.
www.oecd.org/els/benefitsandwagesstatistics.htm. 2012 data.